

**SONY.**



# *Color Rear Video Projector*

## *Operating Instructions for 3 models*

Before operating the projection TV, please read this manual thoroughly and keep it for future reference.

KPR-41EXR95

KPR-46EXR15

KPR-53EXR15

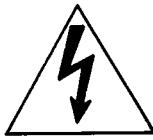
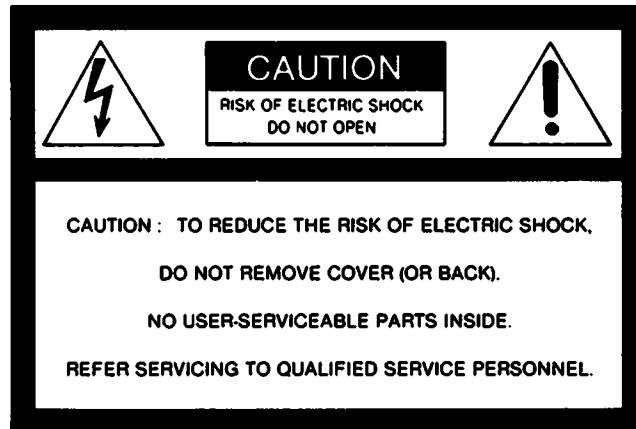


## Preface

# Precautions

### WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

#### Safety

- Operate the projection TV only on 120 V AC.
- One blade of the plug is wider than the other for safety purposes and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- If you spill or drop anything liquid or solid into the cabinet, unplug the projection TV and have it checked by qualified personnel before operating it any further.
- Do not place anything containing liquids (vases, coffee cups, etc.) on the optional VCR tray. Spilled liquid may enter and damage the projection TV.
- Unplug the projection TV from the wall outlet if you are not going to use it for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

If you have any questions or problems concerning the projection TV, contact your nearest Sony dealer.

#### Note to CATV system installer in the USA

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Use of this projection TV for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

#### Owner's Record

The model and serial numbers are located at the rear of the projection TV. Record these numbers in the spaces provided below. Refer to them whenever you call your Sony dealer regarding this product.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

# Contents

## Preface

Precautions .....	2
Welcome .....	4
Features .....	4
Important Information .....	5

## Chapter 1: Setting Up

Unpacking and Viewing Area .....	6
Locating Controls and Connectors .....	7
Making Antenna Connections .....	13
Connecting Other Equipment .....	15
Connecting a VCR, video disc player or Camcorder equipped with an S video output jack .....	15
Connecting a VCR, video disc player or Camcorder not equipped with an S video output jack .....	16

Connecting two VCRs (equipped with an S video output jack) for tape editing .....	17
Connecting two VCRs (not equipped with an S video output jack) for tape editing .....	18
Connecting an audio system .....	19
Using the On-Screen Menus .....	20
Changing the menu language .....	22
Adjusting Color Registration (CONVERGENCE) .....	24
Setting CABLE ON or OFF .....	26
Presetting TV Channels .....	28

## Chapter 2: Using Basic Features

Watching TV Programs .....	34
Using Convenient Features .....	35
Muting the sound – MUTING .....	35
Keeping the displays on-screen – DISPLAY .....	35
Setting the sleep timer – SLEEP .....	35

Switching quickly between two channels – JUMP .....	35
Previewing the features – DEMO .....	35
Selecting a Picture and Sound Mode .....	36

## Chapter 3: Using Advanced Features

Watching Two Pictures at Once (PIP) .....	38
Adjusting the Projection TV .....	42
Adjusting the picture .....	42
Adjusting the sound .....	47
Customizing the Screen Display .....	51
Setting channel captions – CH CAPTION .....	51
Setting VIDEO LABEL .....	53

Using Timer-Activated Functions .....	54
Setting DAYLIGHT SAVING .....	54
Setting the clock – CURRENT TIME SET .....	55
Setting the ON/OFF TIMER .....	57
Setting CHANNEL BLOCK .....	60
Setting FAVORITE CHANNEL .....	62
Using the Pre-Programmed Remote Commander .....	64
Selecting a VCR mode directly – DIRECT PLAY .....	69

## Appendix

Troubleshooting .....	71
Specifications .....	72
Index .....	73

# Welcome

Welcome to the Sony EXR series. By following the instructions in this manual, you will be able to enjoy the advanced technology which brings you useful features and high quality viewing.

## About the manual

This manual covers three different models. The illustrations are based on model KPR-41EXR95. If a particular function does not apply to your model, this will be noted in the manual.

We highly recommend that you read this manual before using your projection TV, to set up and make connections safely and to make maximum use of the many functions. Then keep the manual handy for future reference.

## Features

### Sony's unique features

- The multi-band VHF/UHF/CATV tuner lets you receive up to 125 cable channels, for a total of 181 possible off-air and cable channels.
- The built-in Multichannel TV Sound (MTS) decoder lets you receive stereo programs and Second Audio Program (SAP) broadcasts.
- You can receive superior VCR playback by connecting a VCR with an S video output jack to the S VIDEO IN jack.
- You can receive hi-fi sound by connecting an audio system to the audio output jacks.

### EXR series special features

- Automatically preset all receivable channels with AUTO PROGRAM.
- Switch quickly between two channels, using JUMP.
- Watch another TV channel, video or cable image as a window picture, using Picture-in-Picture.
- Operate the projection TV, plus Sony and most other manufacturers' video equipment, a cable converter box and a Sony multi disc player with the supplied Remote Commander, using the Pre-Programmed feature.
- Call up on-screen menus to set time-related functions (ON/OFF TIMER, CHANNEL BLOCK, DAYLIGHT SAVING), to customize the screen (CH CAPTION, VIDEO LABEL) and to adjust the picture and sound.
- Set optional video equipment on the projection TV, by mounting the optional VCR Tray (see the separate VCR Tray installation instructions).

### EXR series advanced technology

- Dynamic Picture™ system adjusts picture contrast automatically to produce more detail in both bright and dark areas of the picture.
- Velocity Modulation (VM) circuitry produces clean and sharp black and white contrasts.
- Dynamic Focus™ circuitry automatically focuses the scanning electron beam for enhanced sharpness over the entire picture, especially at the corners.
- Trinitone™ control allows you to adjust the picture's color temperature (tint) for the best possible color.

# Important Information

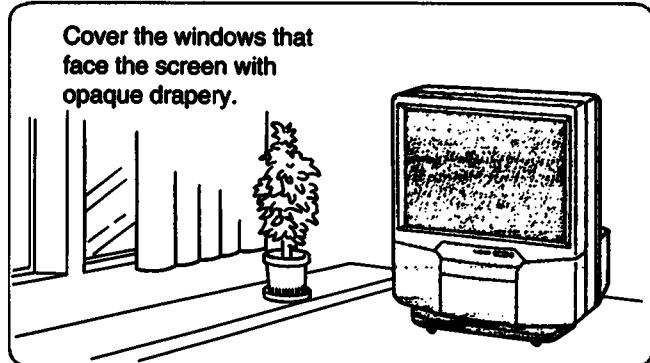
Please read the following information on using and maintaining the projection TV, for optimum viewing quality.

## Picture quality

- Poor color registration (the red, green and blue signals do not overlap properly) may be caused by the influence of the earth's magnetism. Correct this with the CONVERGENCE adjustment (pp. 24 – 25).
- Avoid touching the screen, and take care not to scratch the surface with hard objects.
- Displaying a still picture for long periods of time, for instance, when using the FREEZE function (p. 40) or when operating a video game or personal computer, may damage the picture tube. To avoid this, keep the picture contrast level low (PICTURE adjustment, pp. 42 – 43).

## Illumination

To obtain a clear picture, do not expose the screen to direct illumination or direct sunlight. If possible, use spot lighting directed down from the ceiling.



The floor and walls should not be of a light-reflecting material. If necessary, cover them with dark carpeting or wallpaper.

## Installation

- To prevent internal heat built-up, do not block the ventilation openings.
- Do not install the projection TV in a hot or humid place, or in a place subject to direct sunlight, excessive dust or mechanical vibration.
- Avoid operating the projection TV at temperatures below 5°C (41°F).
- After transporting the projection TV directly from a cold to a warm location, or if the room temperature has changed suddenly, pictures may be blurred or show poor color over portions of the picture. This is because moisture has condensed on the mirrors or lenses inside the projection TV. Let the moisture evaporate before using the projection TV.
- Avoid placing the projection TV on a slanted or uneven floor.

## Maintenance

- Save the original shipping carton and packing material to use if you ever have to ship your projection TV. For maximum protection, repack your projection TV as it was originally packed at the factory.
- To keep the cabinet looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth slightly dampened with a mild detergent solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers since these will damage the cabinet. As a safety precaution, unplug the projection TV before cleaning it.
- To remove dust from the front of the screen, unplug the projection TV and wipe it gently with a soft cloth slightly dampened with water or a mild detergent solution, using vertical strokes only. Then wipe it again with a dry, soft cloth. Never use solvents or thinners for cleaning purposes.
- If the picture turns dark after the projection TV has been in use for a long period of time, it may be necessary to clean the inside of the projection TV. Consult qualified service personnel for this.

# Chapter 1: Setting Up

## Unpacking and Viewing Area

- 1** Carefully follow the instructions on the outside of the packing carton to unpack the projection TV.

### Notes

- The supplied accessories are packed in the bottom of the carton. Be sure not to throw them away.
- Keep the original carton and packing materials to safely transport the projection TV in the future.

- 2** Check to make sure that the following is included:

Universal Remote Commander RM-Y112 (1)  
with 2 size AA (R6) EVEREADY batteries

If the Remote Commander is missing, contact your dealer.

- 3** Place the projection TV in a cool, dry place where the ventilation openings at the sides are not blocked.

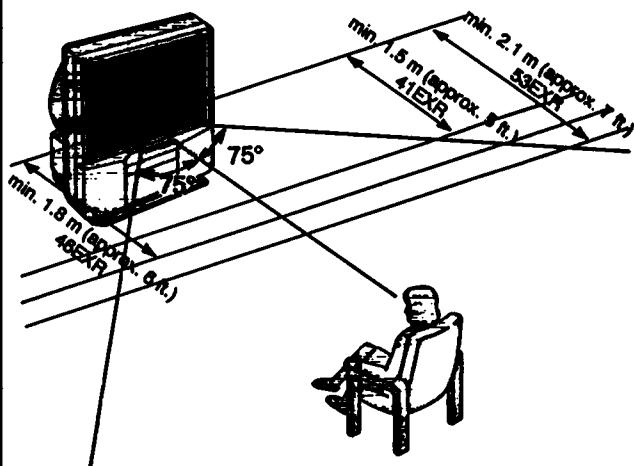
- 4** Plug the projection TV power cord into an AC 120 volt power outlet.

For further precautions, see p. 2.

### Optimum viewing area

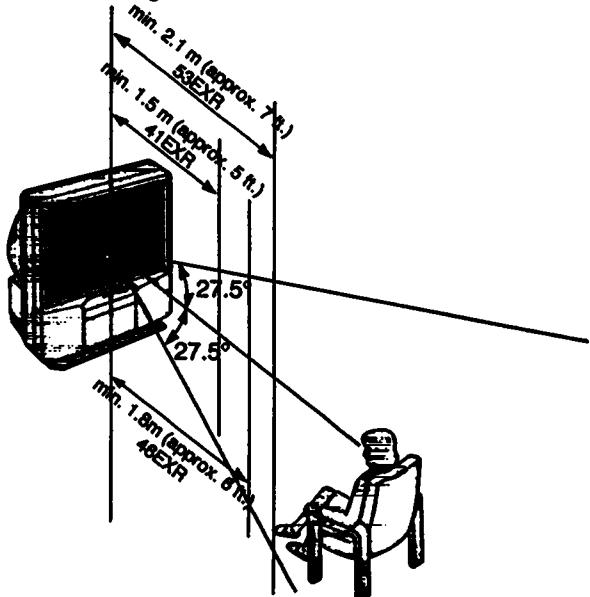
For the best picture quality, try to position the projection TV so that you can view the screen from within the areas shown below.

#### Horizontal viewing area



Optimum viewing position

#### Vertical viewing area

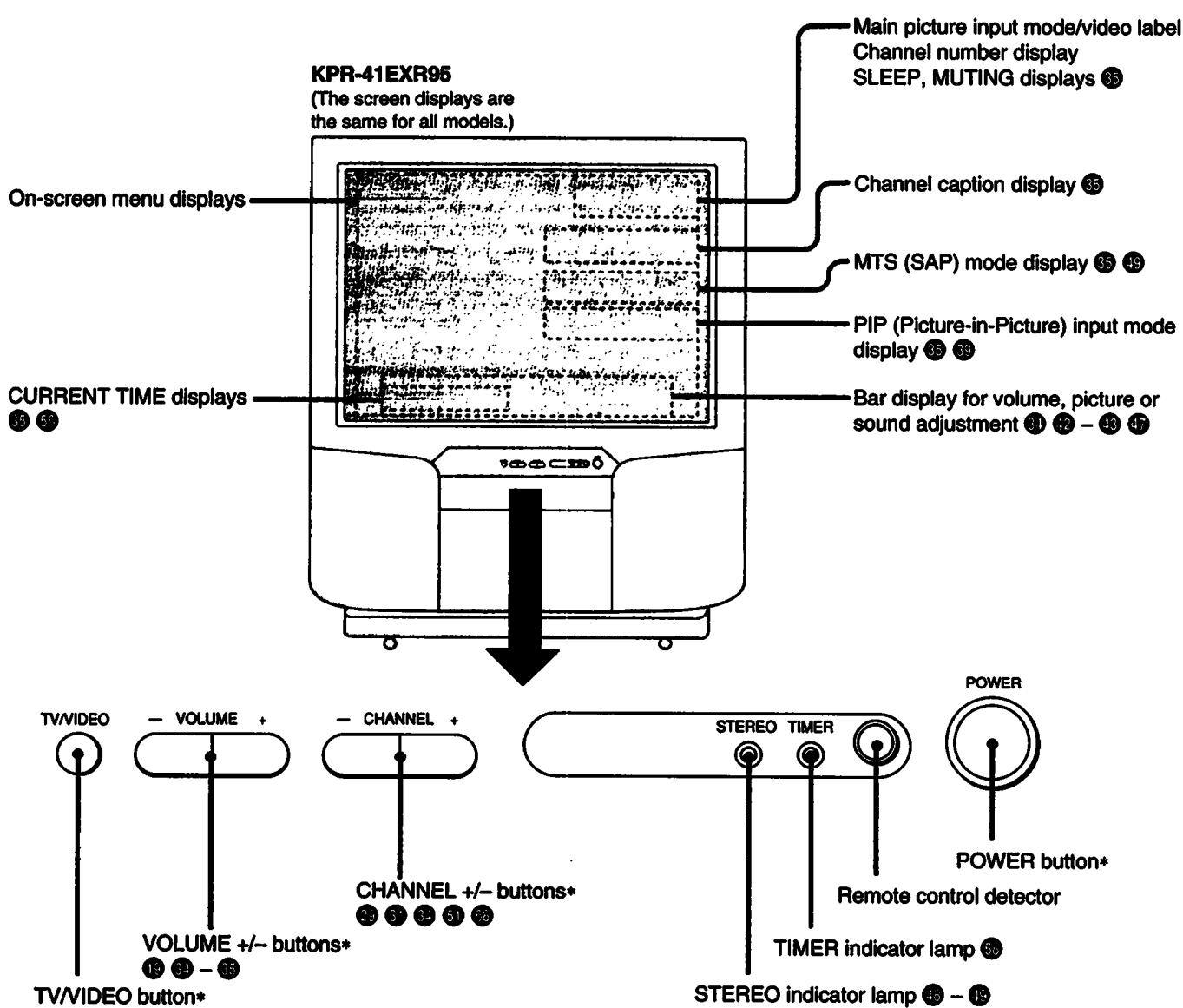


Optimum viewing position

# Locating Controls and Connectors

For details, see the pages indicated by the numbered black circles ●.

## Front

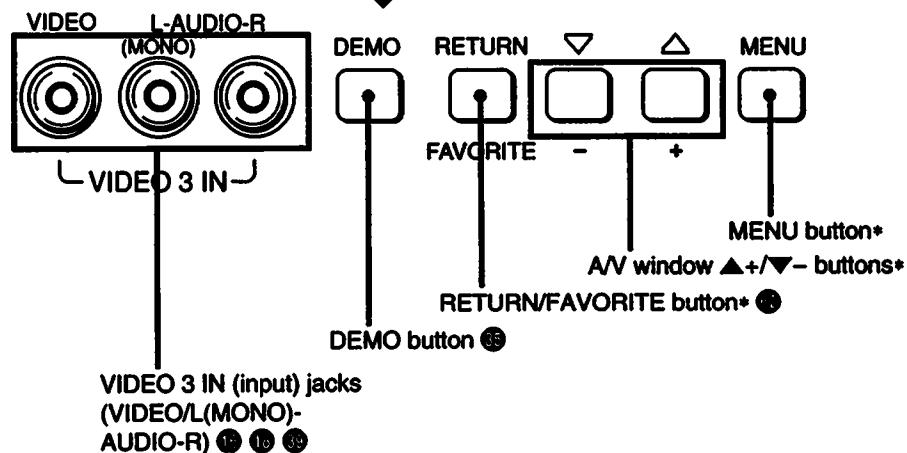
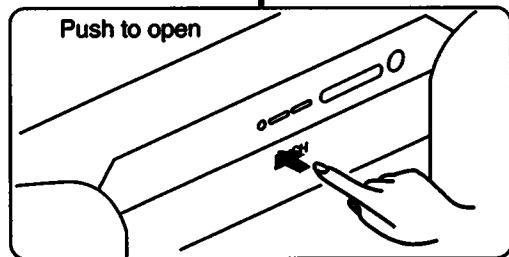
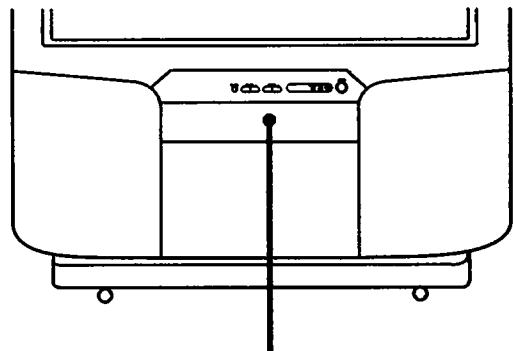


\* Buttons with the same function are also located on the Remote Commander (p. 10).

# Locating Controls and Connectors

## Front inner panel

KPR-41EXR95

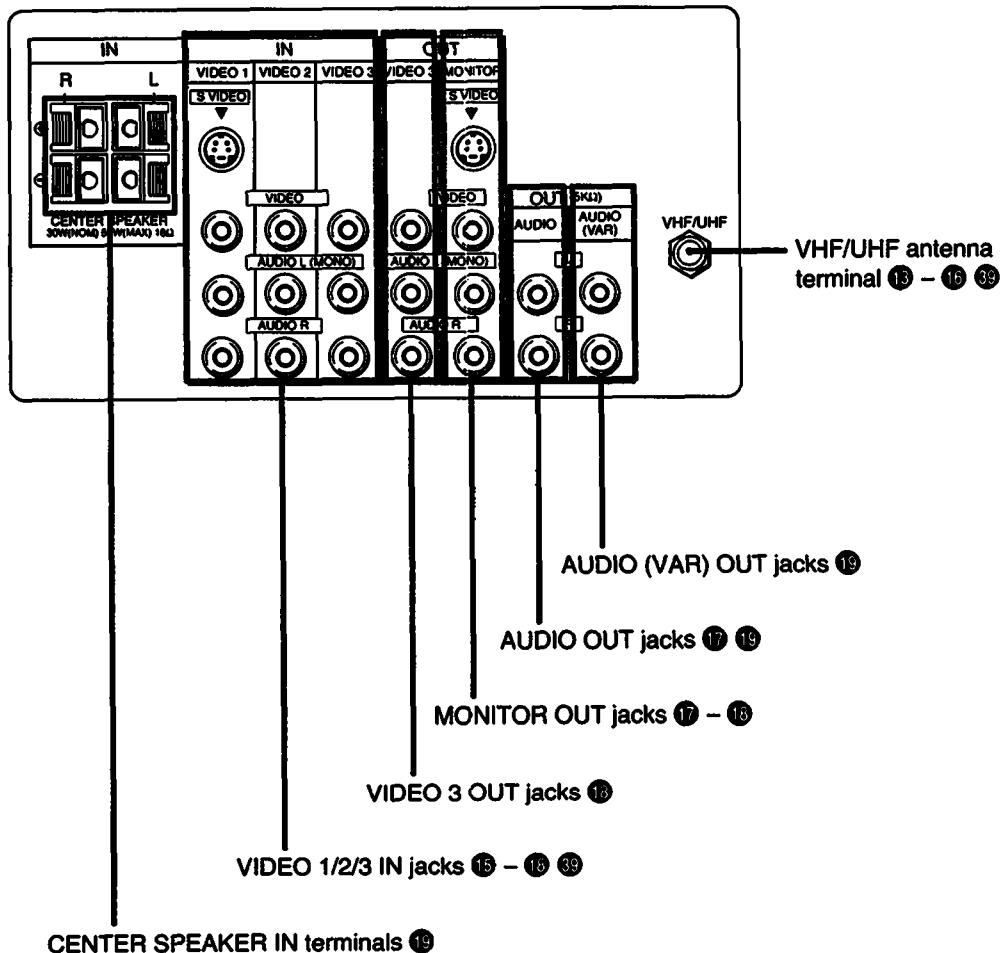


\* Buttons with the same function are also located on the Remote Commander (p. 10).

### Note

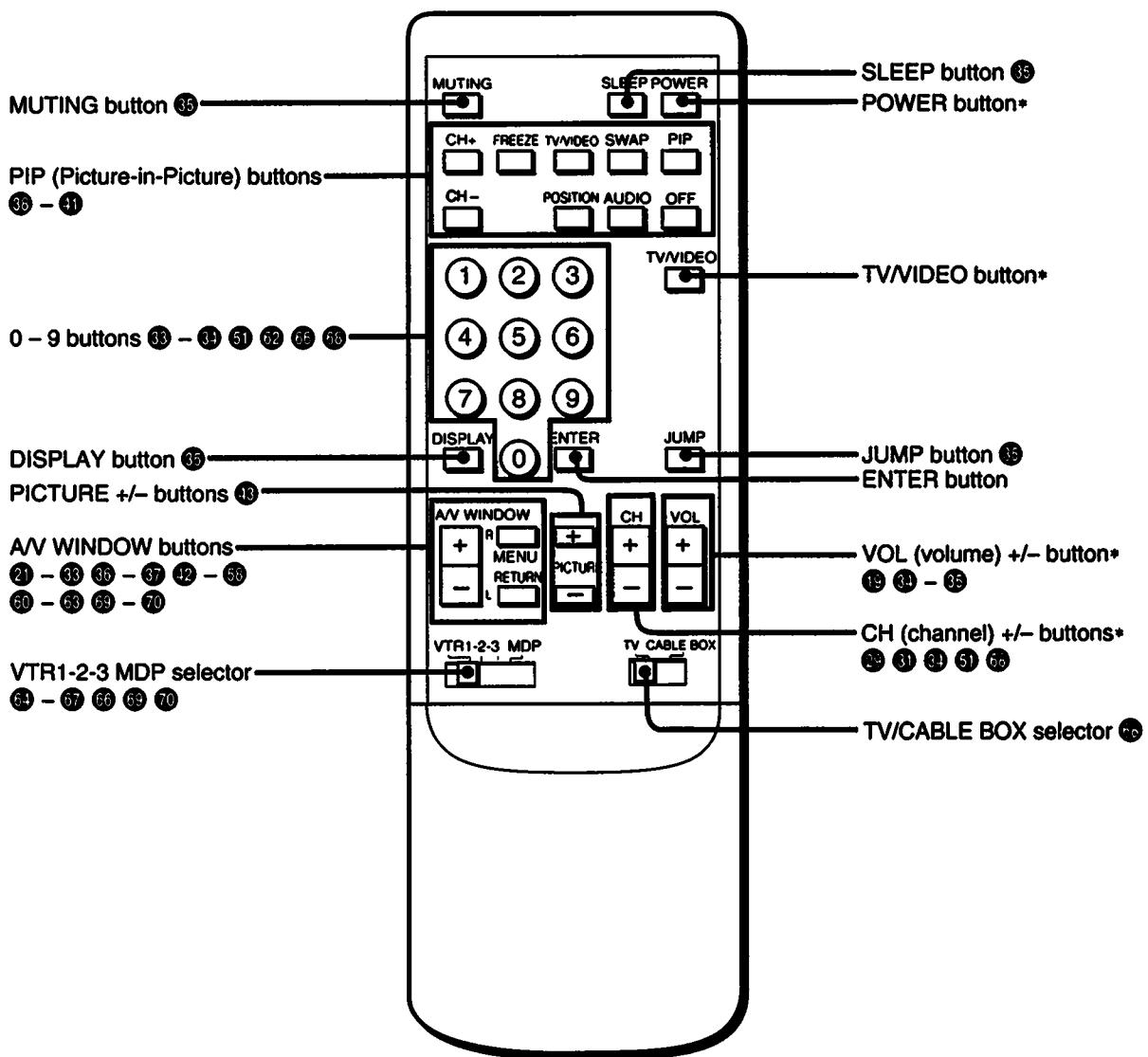
The instructions in this manual are based for the most part on operating the projection TV with the Remote Commander. You can also use the buttons on the projection TV that have the same function.

## KPR-41EXR95



# Locating Controls and Connectors

## Remote Commander RM-Y112 (with the video control cover closed)



\* Buttons with the same function are also located on the projection TV (p. 7).

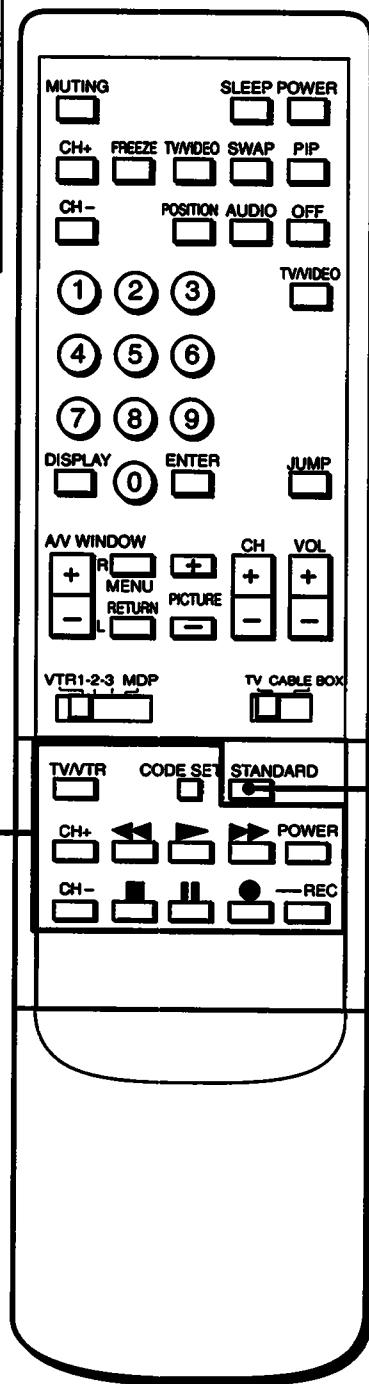
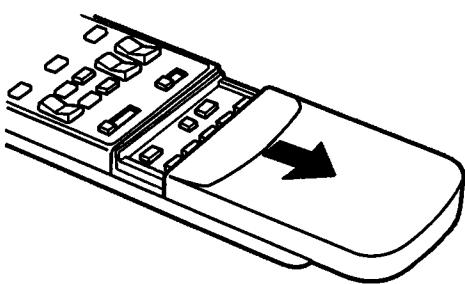
### Note

If the TV/CABLE BOX selector is set to CABLE BOX, the Remote Commander is able to control a connected cable box, not the projection TV (p. 68). Set the selector to TV to control the projection TV with the Remote Commander.

## Remote Commander RM-Y112 (with the video control cover open)

### Opening the video control cover

Slide the cover down.



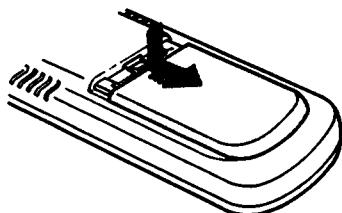
Video operating buttons 64 – 66 68

STANDARD button 37 43 47

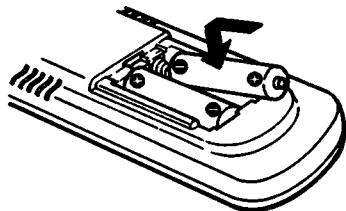
# Locating Controls and Connectors

## Installing batteries in the Remote Commander

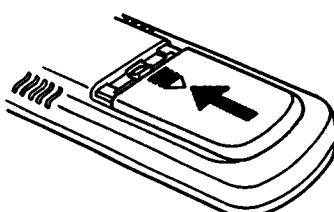
- 1 Push open the lid (rear of the Remote Commander).



- 2 Install two size AA (R6) batteries so that the + and - ends are inserted as shown.



- 3 Replace the lid.



### About battery life

Under normal operation, batteries will last up to half a year. If the Remote Commander does not operate properly, the batteries might be worn out. Replace both of them with new ones.

### To avoid damage from possible battery leakage

Remove the batteries if you do not plan to use the Remote Commander for a fairly long time.

# Making Antenna Connections

Although you can use either an indoor or outdoor antenna with the projection TV, an outdoor antenna will provide you with better picture quality.

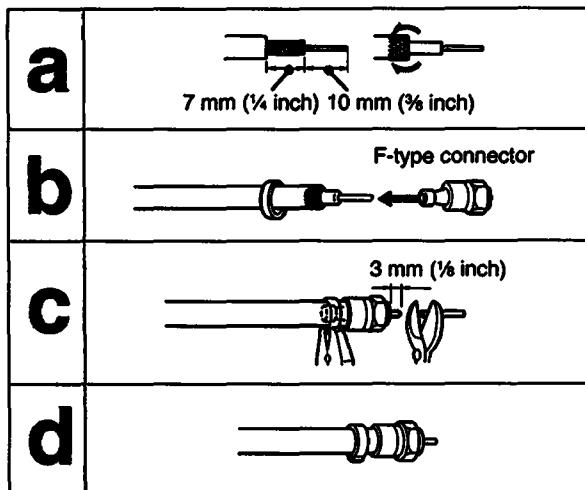
You can receive cable TV by connecting a cable supplied by your local cable company.

## Connecting a VHF, UHF or VHF/UHF combination antenna, or CATV cable

Check your antenna cable type. If you have 75-ohm coaxial cable (round), attach an F-type connector (not supplied). If you have 300-ohm twin-lead cable (flat), attach a 300-75 ohm adaptor (not supplied).

### Using 75-ohm coaxial cable (round)

- 1** Prepare the end of the cable by attaching the F-type connector as shown below.



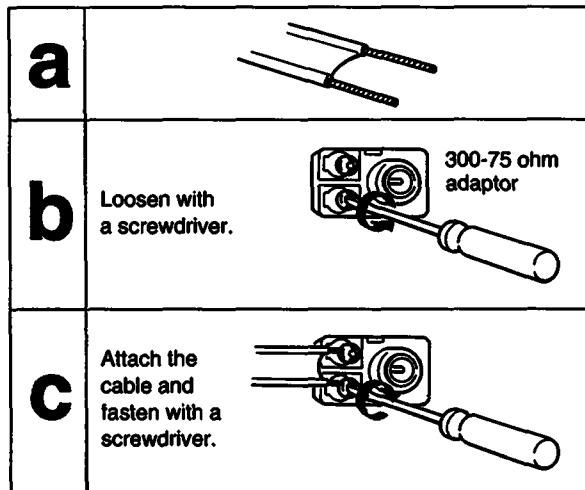
- 2** Plug the connector into the VHF/UHF terminal at the rear of the projection TV.



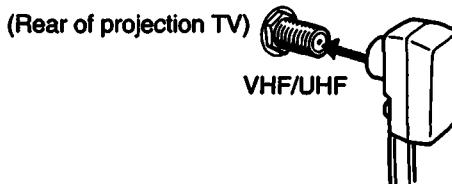
- Most combination antennas are equipped with a signal splitter. Remove the splitter and attach the appropriate connector.

### Using 300-ohm twin-lead cable (flat)

- 1** Prepare the end of the cable by attaching the 300-75 ohm adaptor as shown below.

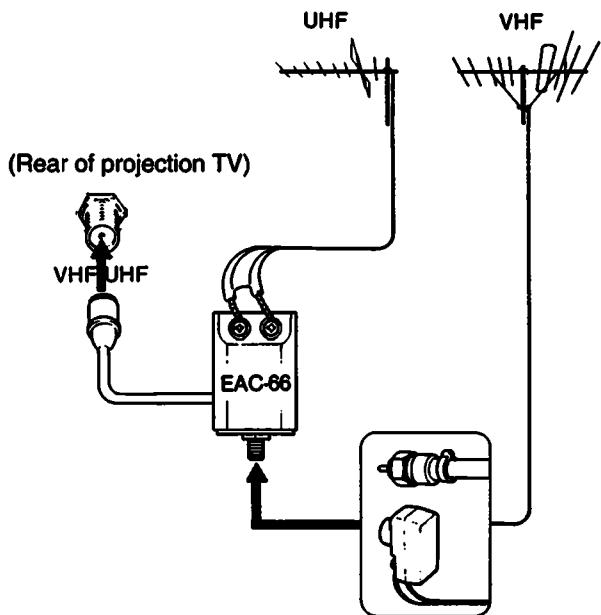


- 2** Plug the adaptor into the VHF/UHF terminal at the rear of the projection TV.



# Making Antenna Connections

Connecting both VHF and UHF antennas



Use an EAC-66 U/V mixer (not supplied).

**1** Prepare the VHF antenna cable using the appropriate connector (p. 13).

**2** Connect the cable to the U/V mixer.

**3** Connect the U/V mixer to the VHF/UHF terminal.

#### When you use the U/V mixer

Snow and noise may appear in the picture when viewing cable TV channels over 37 (W + 1).

# Connecting Other Equipment

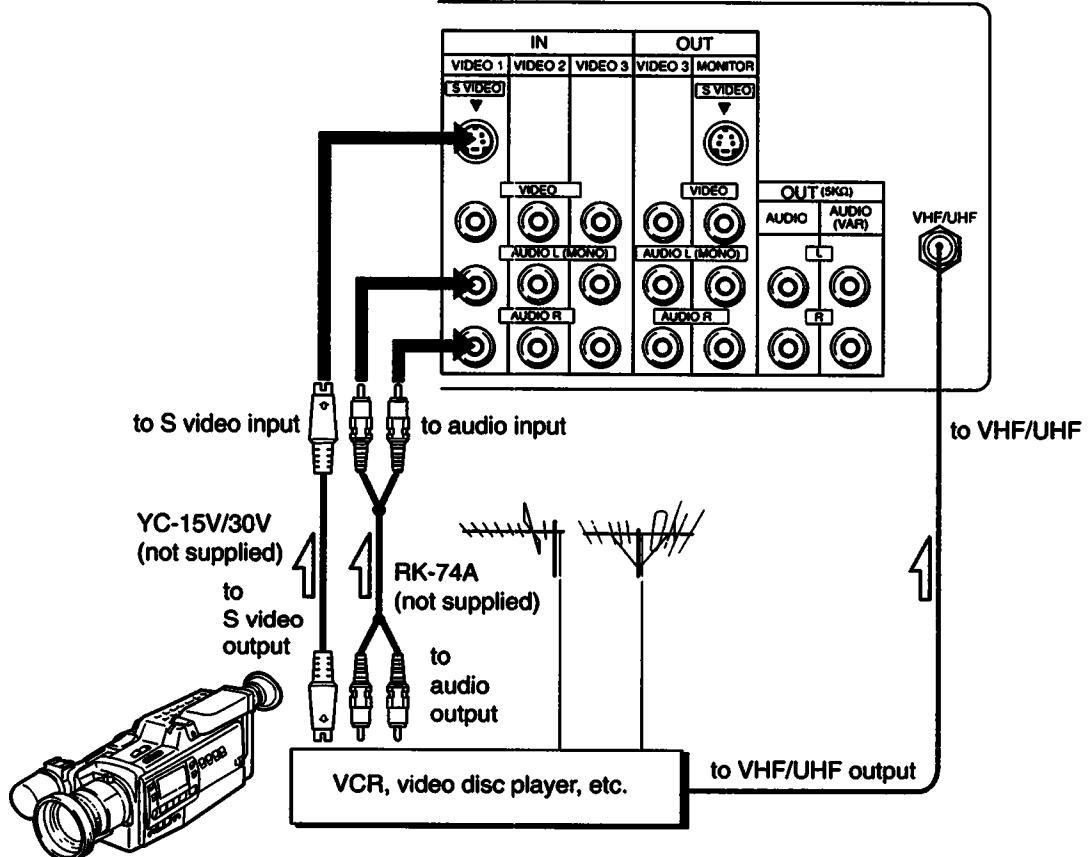
After making these connections, you will be able to do the following:

- View the playback of video tapes
- Record TV programs
- Record one TV program while viewing another program

Connecting a VCR, video disc player or Camcorder equipped with an S video output jack

◀ : Signal flow

(Rear of projection TV)



## Preparing for use

- 1 Turn on the projection TV.
- 2 Set S-VIDEO to "ON" (p. 46).
- 3 Press TV/VIDEO on the projection TV or on the Remote Commander so that "VIDEO 1" appears on the screen.

## To return to TV mode

Press TV/VIDEO or CHANNEL +/- on the projection TV, or press TV/VIDEO, CH +/- or 0 – 9 and ENTER on the Remote Commander so that a channel number appears on the screen.

## Note

You can watch both a TV and a VCR image at once, using Picture-in-Picture (pp. 38 – 41).

## Operating the equipment

To operate the video equipment, refer to the instruction manual that comes with the equipment.

You can operate a Sony VCR or video disc player, or a non-Sony VCR with the supplied Remote Commander. For details, see "Using the Pre-Programmed Remote Commander" (pp. 64 – 70).

## About S video input

Video input and output signals can be separated into Y (luminance or brightness) and C (chroma or color) signals. Usually these two signals are combined in a VCR and sent as one signal to a projection TV. Separation of the Y and C signals prevents them from interfering with one another, thereby improving picture (especially color) quality.

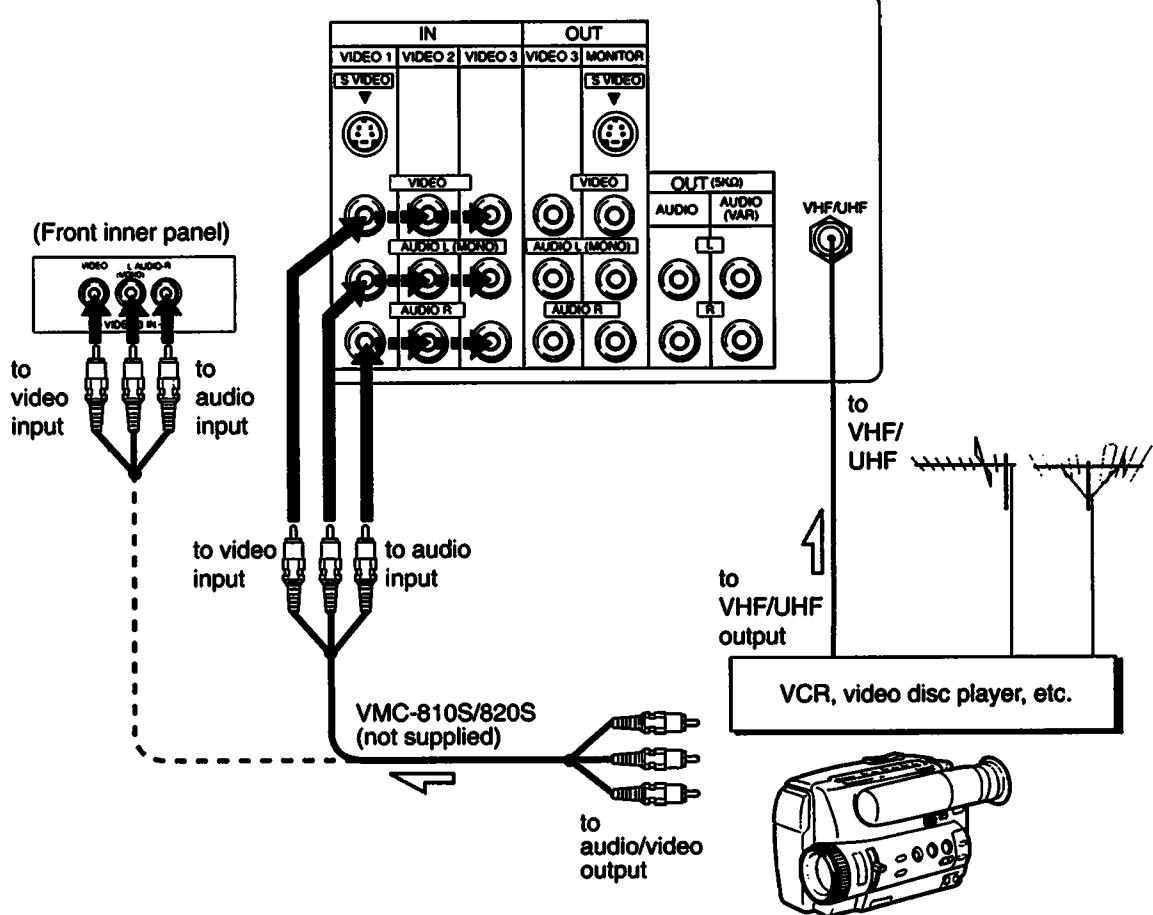
This projection TV is equipped with S video input jacks through which these separated signals can be input directly.

# Connecting Other Equipment

Connecting a VCR, video disc player or Camcorder not equipped with an S video output jack

↖ : Signal flow

(Rear of projection TV)



## Preparing for use

- 1 Turn on the projection TV.
- 2 Press TV/VIDEO on the projection TV or on the Remote Commander so that "VIDEO 1," "VIDEO 2" or "VIDEO 3" appears on the screen.  
VIDEO 1: for equipment connected to VIDEO 1 IN  
VIDEO 2: for equipment connected to VIDEO 2 IN  
VIDEO 3: for equipment connected to VIDEO 3 IN

## Operating the equipment

Same as p. 15.

### To return to TV mode

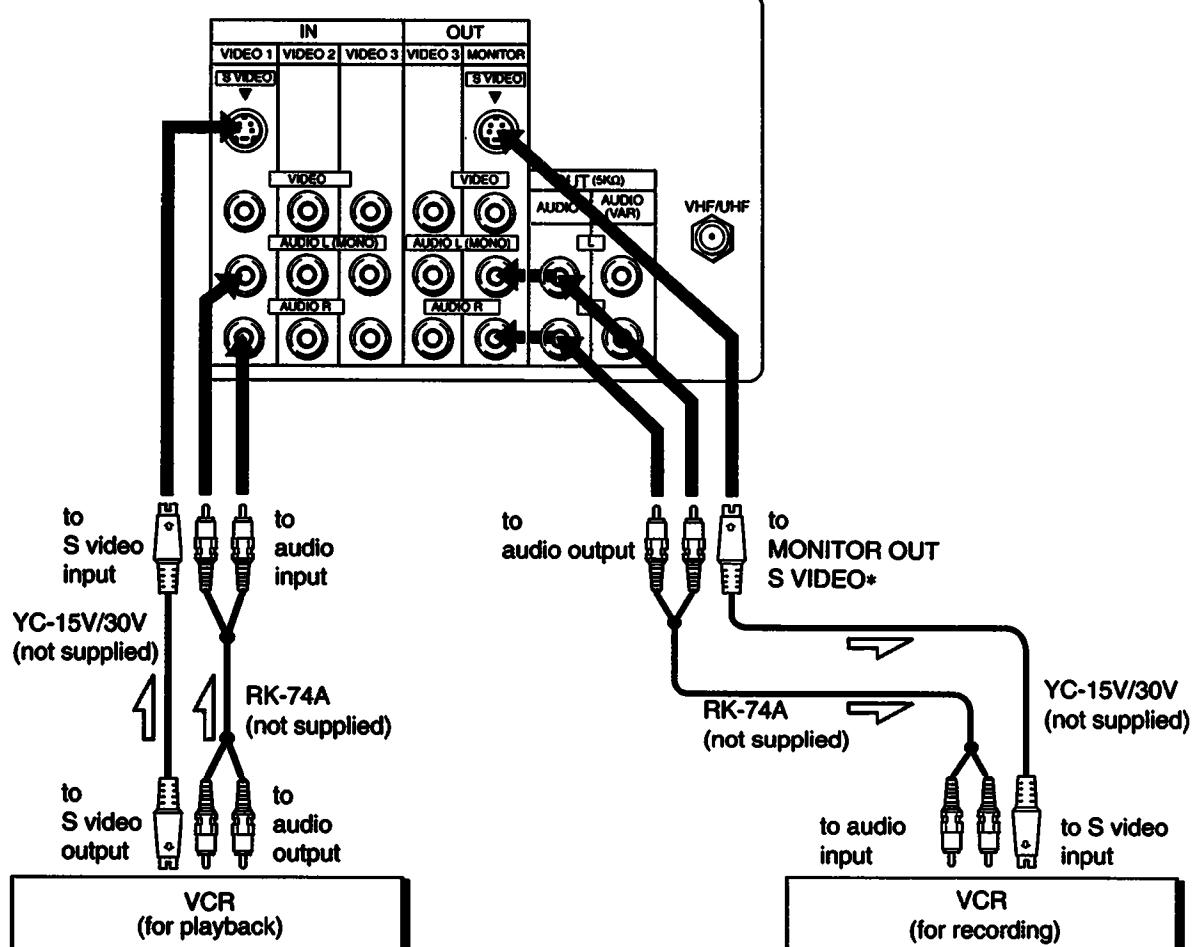
Press TV/VIDEO or CHANNEL +/- on the projection TV, or press TV/VIDEO, CH +/- or 0 – 9 and ENTER on the Remote Commander so that a channel number appears on the screen.

### Notes

- If you try to use equipment that is connected to the front and rear VIDEO 3 IN jacks at the same time, the picture will be distorted. Be sure you turn off one piece of equipment first.
- If you have connected to a Camcorder's input jacks, do not connect to the projection TV's input jacks.
- You can label each of the video input modes (p. 53).
- You do not need to select a video mode when you use the direct play function (pp. 69 – 70).
- If you connect a monaural VCR, connect the audio output of the VCR to the L (MONO) jack of VIDEO IN (1, 2 or 3). The monaural sound will be heard from both speakers.

Connecting two VCRs (equipped with an S video output jack) for tape editing

↖ : Signal flow (Rear of projection TV)



### Preparing for use/Operating the equipment

Same as p. 15.

- \* It is not necessary to connect to the MONITOR OUT S VIDEO jack to receive the S video input signal. You can make the connection as shown above, or connect the MONITOR OUT jacks to the VCR for recording, using the VMC-810S/820S connector (not supplied).

### Note

Do not change the input signal while editing through MONITOR OUT, or the output signal will also change.

### Caution

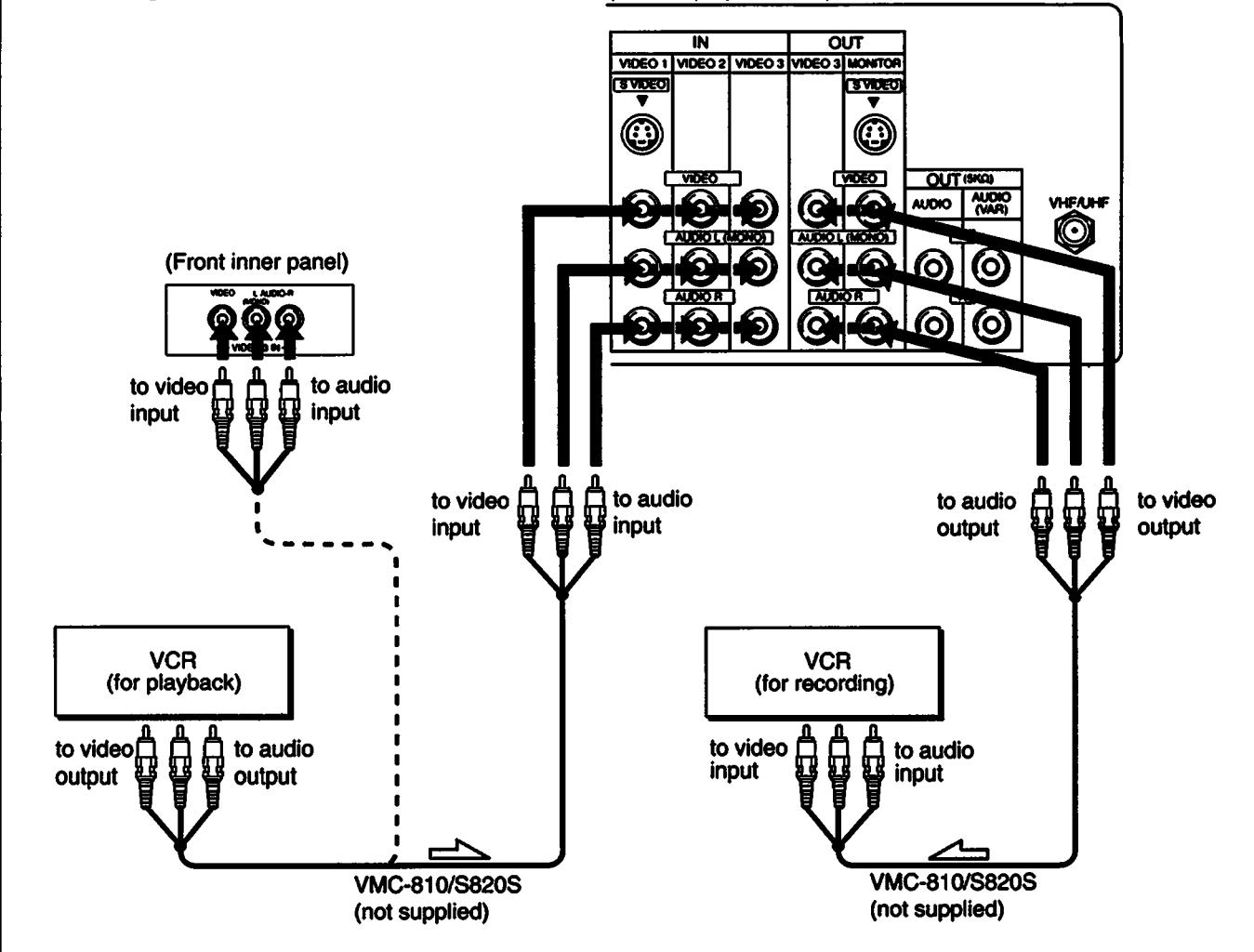
Video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

# Connecting Other Equipment

Connecting two VCRs (not equipped with an S video output jack) for tape editing

: Signal flow

(Rear of projection TV)



## Preparing for use

- 1 Turn on the projection TV.
- 2 Press TV/VIDEO on the projection TV or on the Remote Commander so that "VIDEO 1," "VIDEO 2" or "VIDEO 3" appears on the screen.  
VIDEO 1: for equipment connected to VIDEO 1 IN  
VIDEO 2: for equipment connected to VIDEO 2 IN  
VIDEO 3: for equipment connected to VIDEO 3 IN

### Notes

- If you try to use equipment that is connected to the front and rear VIDEO 3 IN jacks at the same time, the picture will be distorted. Be sure you turn off one piece of equipment first.
- If you have connected to a Camcorder's input jacks, do not connect to the projection TV's input jacks.
- If you connect equipment to the rear VIDEO 3 IN S VIDEO jack, you cannot receive the output signal from the VIDEO 3 OUT VIDEO jack.

## Watching a different image while duplicating

The VIDEO 3 OUT jacks only output the signal from the VIDEO 3 input jacks.

If you connect a VCR for playback to the front or rear VIDEO 3 IN jacks, and a VCR for recording to the VIDEO 3 OUT jacks to duplicate your recorded tapes, you can watch input images different from the image being output for recording.

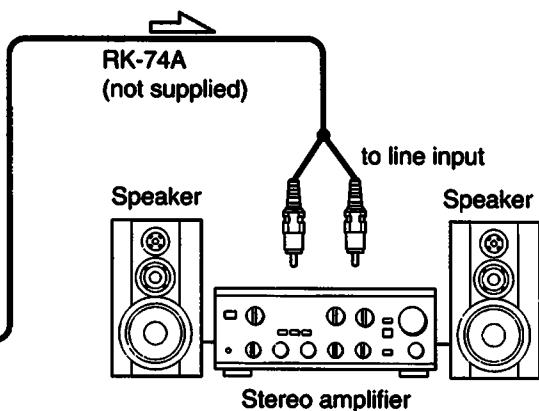
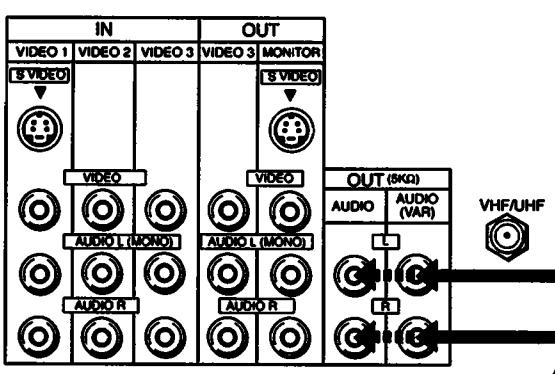
### To watch a different input image

Press TV/VIDEO on the projection TV or on the Remote Commander to select the input image you want to watch.

## Connecting a stereo audio system

: Signal flow

(Rear of projection TV)

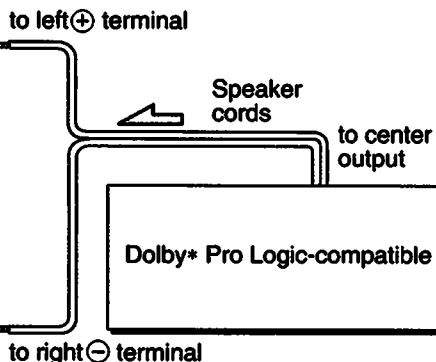
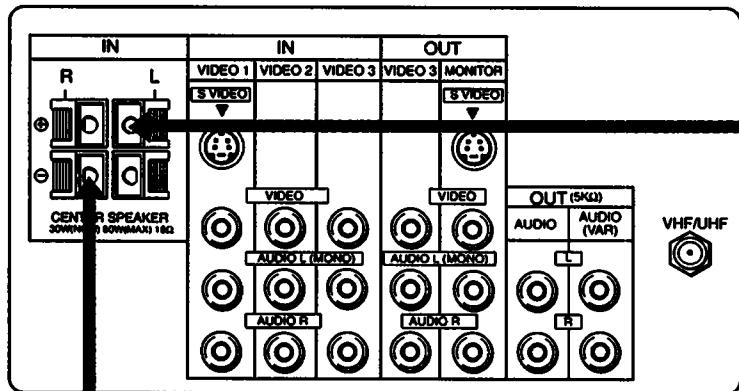


Set the amplifier's function to line input.

## Using the TV speakers as center speakers

: Signal flow

(Rear of projection TV)



Dolby\* Pro Logic-compatible amplifier

## Preparing for use

Display the mode set menu and set SPEAKER to "CENTER" to cut off the projection TV speaker sound (p. 50), and listen to the projection TV's sound solely through the audio system speakers.

## Using the projection TV speakers as center speakers

You can only connect a Dolby\* Pro Logic-compatible amplifier to CENTER SPEAKER IN; always make the connection as shown above. Never connect to the right (R +) or left (L +) terminals only.

### Caution

- Always turn off the amplifier power before connecting to CENTER SPEAKER IN.
- Always match the speaker cord and terminal colors when making the connection.
  
- \* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,632,886, 3,746,792 and 3,959,590. "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

## Adjusting the sound level

If you connect a stereo audio system to AUDIO (VAR) OUT, leave the amplifier volume, bass and treble controls at their mid position, and adjust the level with the VOLUME +/- buttons on the projection TV or the VOL +/- buttons on the Remote Commander.

If you connect a stereo system to AUDIO OUT or a monaural system to CENTER SPEAKER IN, adjust the speaker volume with the amplifier controls.

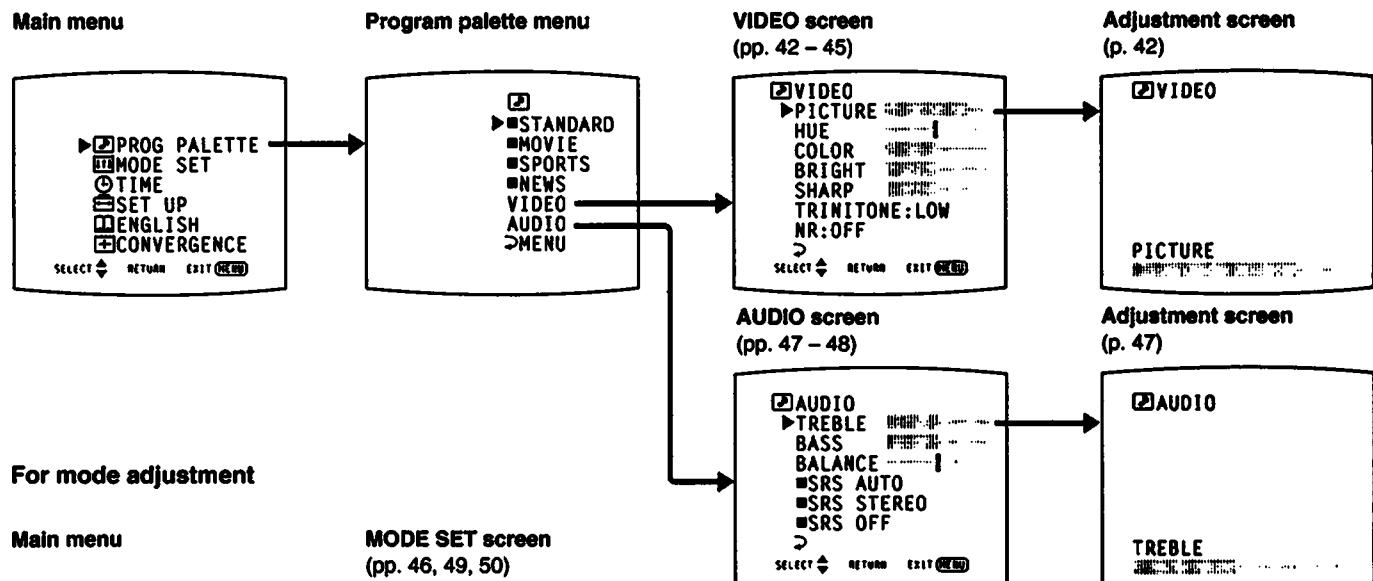
### Note

By connecting to AUDIO (VAR) OUT, you can adjust the bass, treble and balance, or select an SRS (Sound Retrieval System) or an MTS (Multichannel TV Sound) mode, using the on-screen menus (pp. 47 – 49).

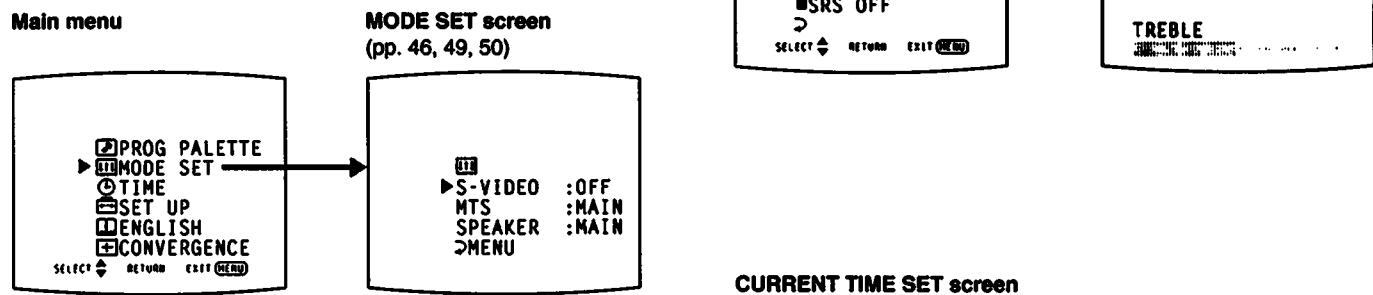
# Using the On-Screen Menus

The following flow chart shows the different levels of on-screen menus that you can use to make various adjustments and settings. See the indicated pages for instructions on using each feature.

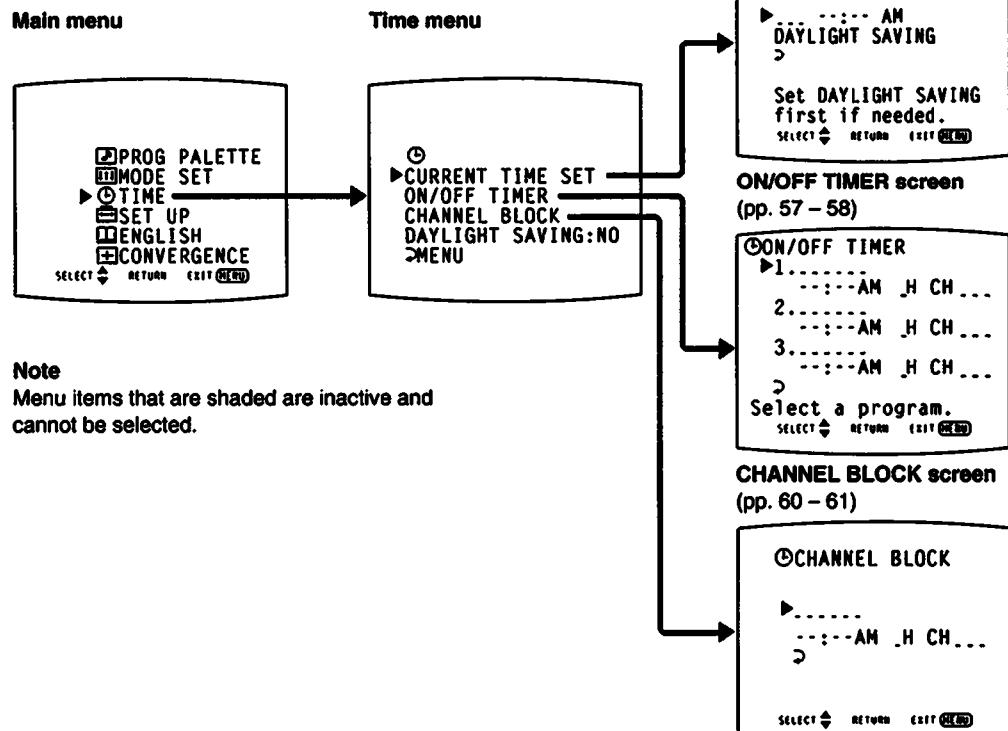
## For picture and sound quality adjustment



## For mode adjustment



## For time-related settings

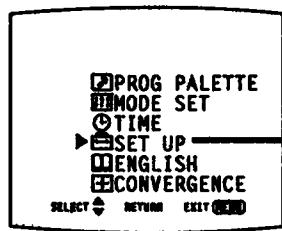


## Note

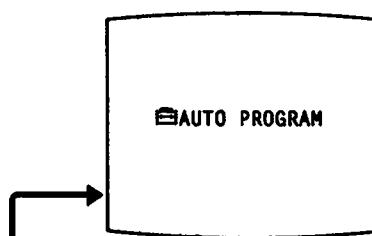
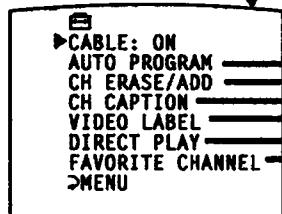
Menu items that are shaded are inactive and cannot be selected.

## For presetting and other functions

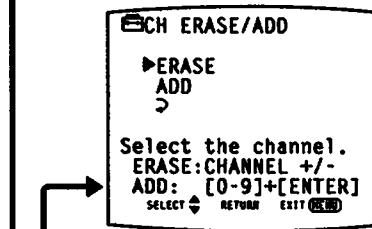
### Main menu



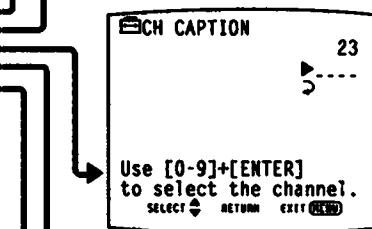
SET UP screen



**AUTO PROGRAM**  
screen  
(p. 29)



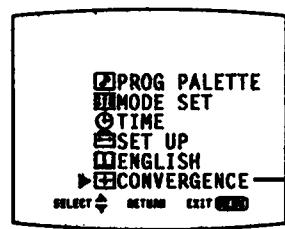
**CH (channel)**  
**ERASE/ADD** screen  
(pp. 31, 33)



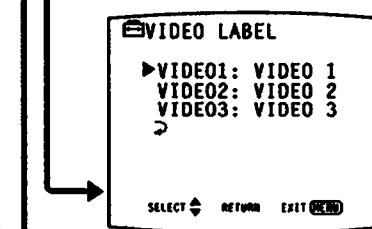
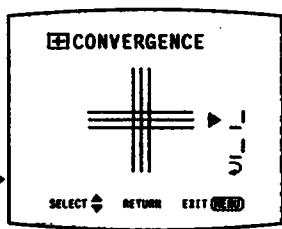
**CH (channel)**  
**CAPTION** screen  
(pp. 51 – 52)

### For CONVERGENCE adjustment

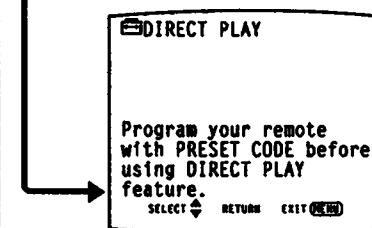
#### Main menu



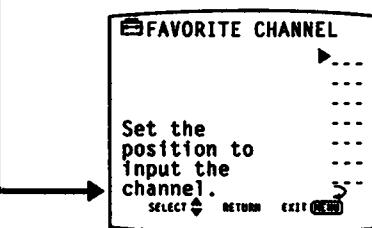
**CONVERGENCE** screen  
(pp. 24 – 25)



**VIDEO LABEL**  
screen  
(p. 53)



**DIRECT PLAY**  
screen  
(pp. 69 – 70)



**FAVORITE CHANNEL**  
screen  
(pp. 62 – 63)

### To display the main menu

Press MENU.

### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "► MENU."

Then press RETURN.

### To return to the main menu

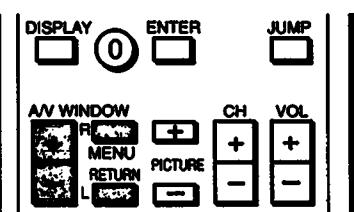
Repeat the above, until you reach the main menu.

### To return to the normal screen

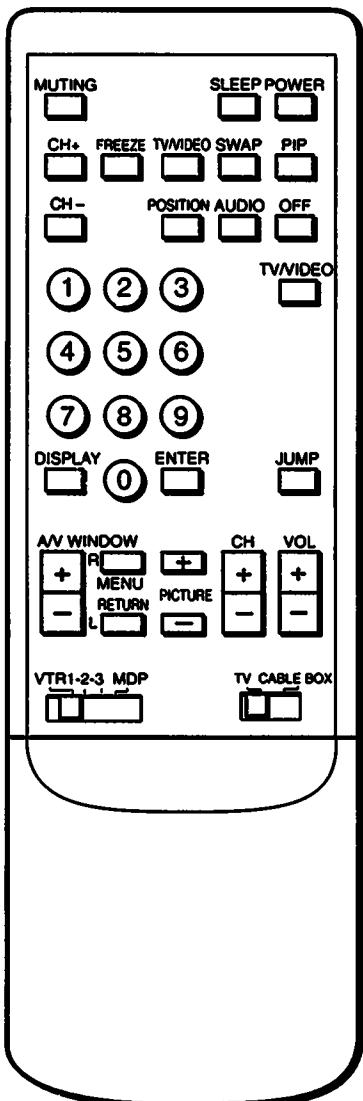
Press MENU.

### Note

The menus disappear automatically, if you do not press a button within 90 seconds.



## Using the On-Screen Menus



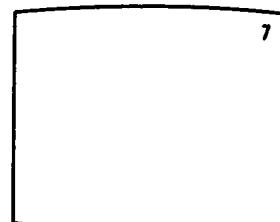
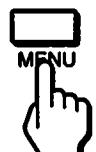
### Changing the menu language

The menu language is factory-set to ENGLISH. Follow these instructions to change the menu language to Spanish or French, or back to English.

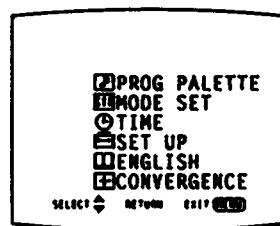
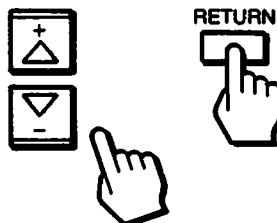
- 1 Press POWER to turn on the projection TV.



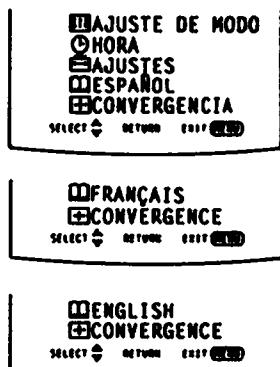
- 2 Press MENU.  
*The main menu appears.*



- 3 Press A/V WINDOW +/- until the cursor points to "ENGLISH."  
Then press RETURN.  
*The language display turns red.*



- 4 Press A/V WINDOW +/- to select the language.  
*Each time you press A/V WINDOW +/-, the "ESPAÑOL," "FRANÇAIS" and "ENGLISH" menus appear.*



#### Note

Certain parts of the "ESPAÑOL" and "FRANÇAIS" menus remain in English.

**5** Press RETURN.  
*The language is selected.*



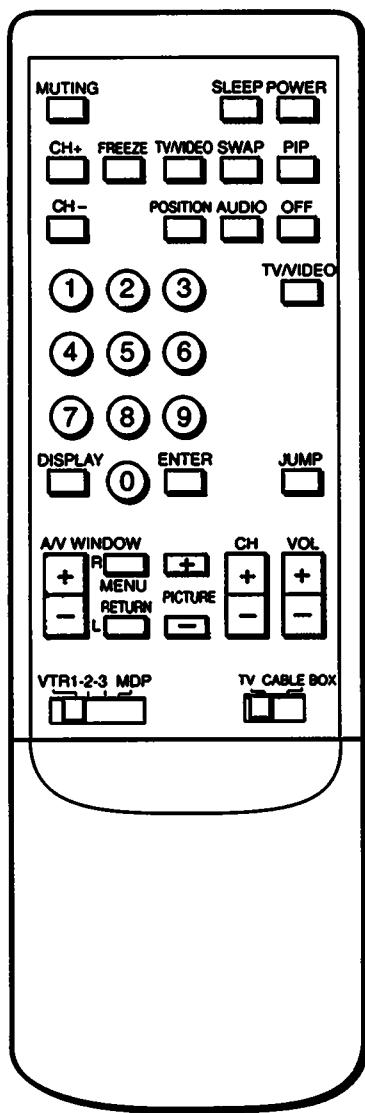
Spanish menu

To return to the normal screen.  
Press MENU.

**Notes concerning menus**

- During PIP (Picture-in-Picture) mode, the on-screen menus may overlap the window picture.
- The menus disappear automatically, if you do not press a button within 90 seconds.

# Adjusting Color Registration (CONVERGENCE)

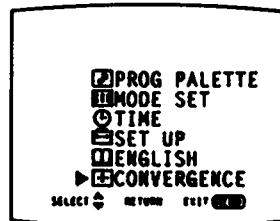
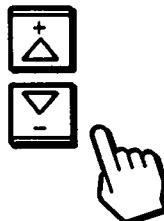


In a projection TV, the projection tube image appears on the screen in three color layers (red, green and blue). If these layers are not in proper registration, the color is poor and the picture blurs. To correct this, perform the CONVERGENCE adjustment.

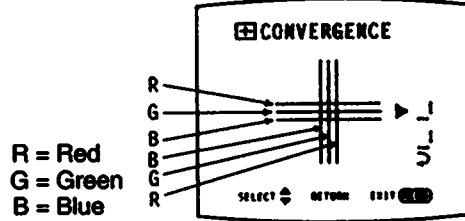
- 1** Press MENU.  
*The main menu appears.*



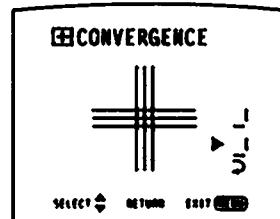
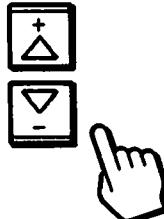
- 2** Press A/V WINDOW +/- until the cursor points to "CONVERGENCE."



- 3** Press RETURN.  
*The CONVERGENCE screen and the colored adjustment lines appear.*



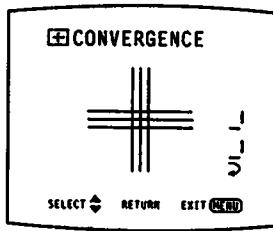
- 4** Press A/V WINDOW +/- until the cursor points to the symbol representing the line you want to adjust (see the key below).



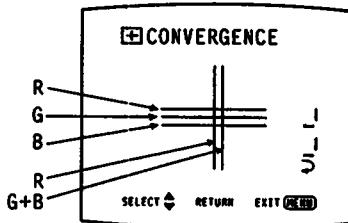
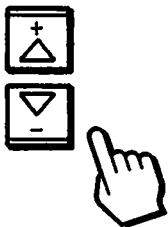
## Adjustment line symbols key

- | (red vertical: left/right adjustment)
- (red horizontal: up/down adjustment)
- | (blue vertical: left/right adjustment)
- (blue horizontal: up/down adjustment)

- 5** Press RETURN.  
The adjustment line is selected.

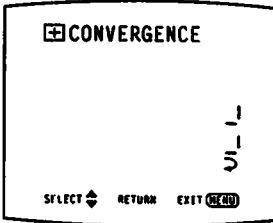


- 6** Press A/V WINDOW +/- until the line converges with the center green line.  
Then press RETURN.



To move up To move right	Press A/V WINDOW +.
To move down To move left	Press A/V WINDOW -.

- 7** Repeat steps 4 – 6 to adjust the other lines, until all the lines have overlapped to form a white cross.

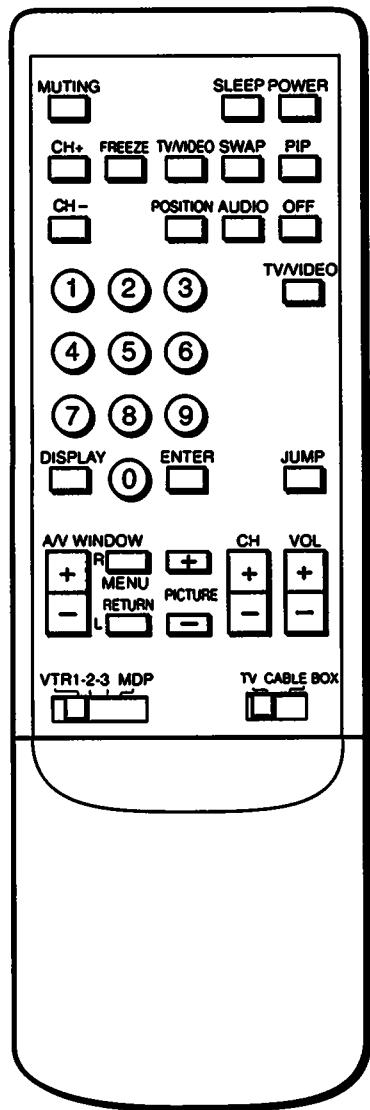


To return to the previous menu  
Press A/V WINDOW +/- until the cursor points to " MENU."  
Then press RETURN.

To return to the main menu  
Repeat the above, until you reach the main menu.

To return to the normal screen.  
Press MENU.

# Setting CABLE ON or OFF



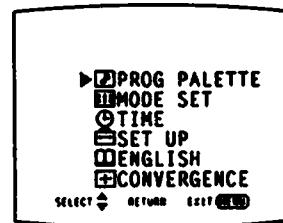
If you have cable connected to the projection TV, follow the steps below to set the cable connection on or off. Set CABLE OFF to preset or watch VHF or UHF channels, and set CABLE ON to preset or watch cable TV channels.

**Note**

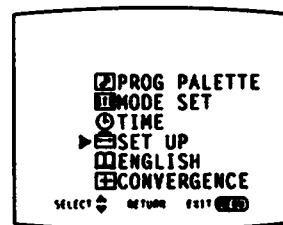
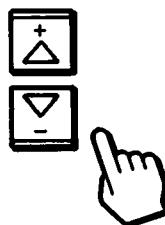
If the projection TV is in video mode, the "CABLE" display is shaded and cannot be selected.

Press TV/VIDEO to change to TV mode.

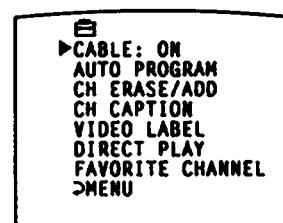
- 1 Press MENU.  
*The main menu appears.*



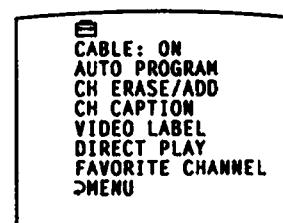
- 2 Press A/V WINDOW +/- until the cursor points to "SET UP."



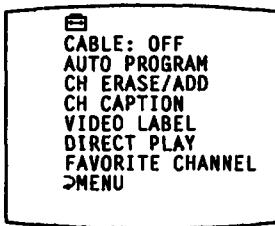
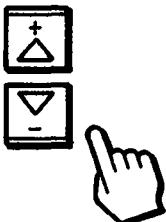
- 3 Press RETURN.  
*The set up menu appears, and the cursor points to "CABLE."*



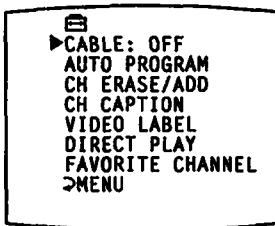
- 4 Press RETURN again.  
*The mode display turns red.*



**5** Press A/V WINDOW +/- to select "ON" or "OFF."



**6** Press RETURN.  
*The setting is complete.*



#### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "► MENU."

Then press RETURN.

#### To return to the main menu

Repeat the above, until you reach the main menu.

#### To return to the normal screen.

Press MENU.

#### Cable TV channel chart\*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

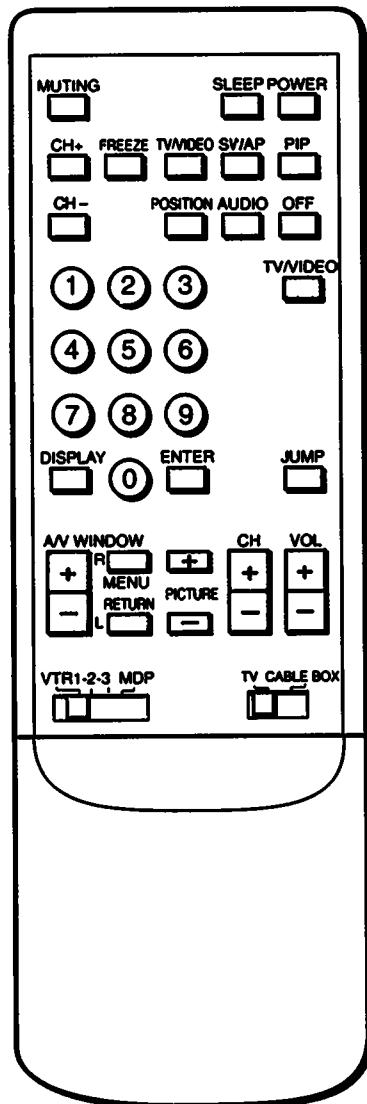
Number on this TV	Corresponding CATV channel
1	A-8
5	A-7
6	A-6
14	A
15	B
16	C
17	D
18	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S
33	T
34	U
35	V
36	W
37	W+1
38	W+2
39	W+3
•	•
•	•
•	•
93	W+57
94	W+58
95	A-5
96	A-4
97	A-3
98	A-2
99	A-1
100	W+59
101	W+60
102	W+61
•	•
•	•
•	•
123	W+82
124	W+83
125	W+84

Check with your local cable TV company for more complete information on the available channels.

\* The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

# Presetting TV Channels

By presetting TV channels to the projection TV, you can select channels by pressing CH (CHANNEL) +/-.  
(You can select VHF channels 2 – 13 without presetting.)



## Presetting all receivable channels automatically

Follow these instructions to preset all the receivable VHF, UHF or cable TV channels to the projection TV.

### Notes

- If the projection TV is in video mode, the "AUTO PROGRAM" display is shaded and cannot be selected. Press TV/VIDEO to change to TV mode.
- Perform auto programming during the day rather than late at night, when some channels may not be broadcasting.

- 1** Set the cable connection on or off (pp. 26 – 27) to select the type of channel you want to preset, VHF/UHF or cable TV.



To preset VHF  
or UHF channels

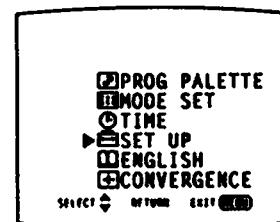
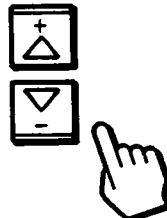


To preset  
cable TV channels

- 2** Press MENU.  
*The main menu appears.*

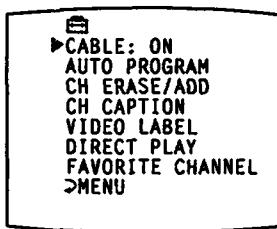


- 3** Press A/V WINDOW +/- until the cursor points to "SET UP."



- 4** Press RETURN.  
The set up menu appears.

RETURN



#### Receivable channels for this projection

TV  
VHF: 2 – 13  
UHF: 14 – 69  
Cable: 1 – 125

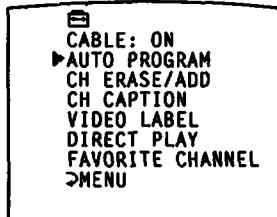
- To select TV channels without presetting  
Press the 0 – 9 buttons and ENTER.

To return to the previous menu  
Press A/V WINDOW +/- until the cursor points to "► MENU."  
Then press RETURN.

To return to the main menu  
Repeat the above, until you reach the main menu.

To return to the normal screen.  
Press MENU.

- 5** Press A/V WINDOW +/- until the cursor points to "AUTO PROGRAM."



- 6** Press RETURN.

RETURN



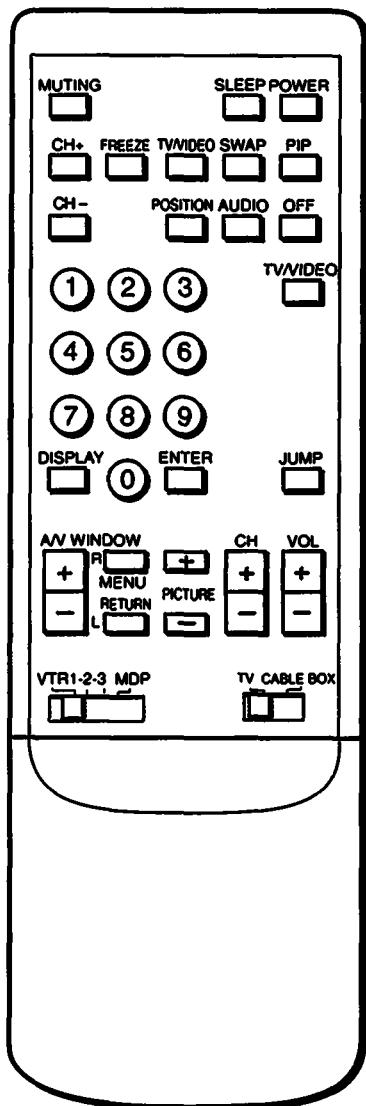
"AUTO PROGRAM" appears on the screen and receivable channels (other than the channels already preset) are preset in numerical sequence. The channels previously preset will not remain in the projection TV's memory.

When no more channels are found, auto programming stops and the screen returns automatically to the set up menu.

- 7** Press CH +/- to check or view the preset channels.



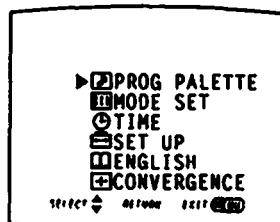
# Presetting TV Channels



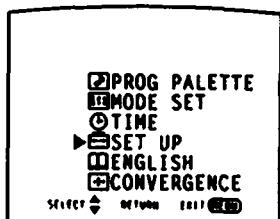
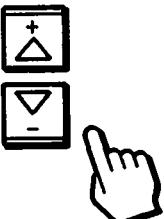
## Erasing TV channels

Follow these instructions to erase unnecessary TV channels, so that when you press CH +/-, the channel(s) are skipped.

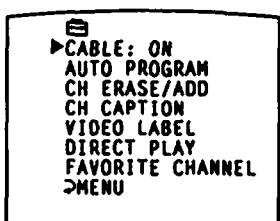
- 1 Press MENU  
*The main menu appears.*



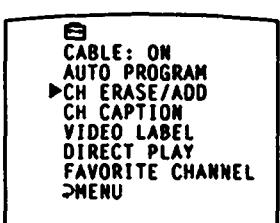
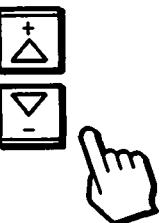
- 2 Press A/V WINDOW +/- until the cursor points to "SET UP."



- 3 Press RETURN  
*The set up menu appears.*



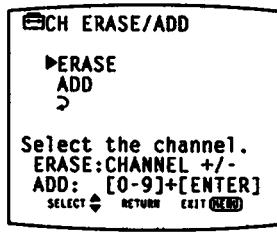
- 4 Press A/V WINDOW +/- until the cursor points to "CH ERASE/ADD."



## 5 Press RETURN.

The CH ERASE/ADD screen appears, and the cursor points to "ERASE."

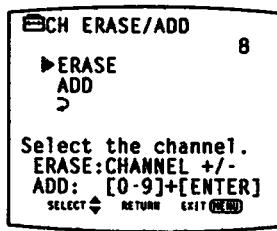
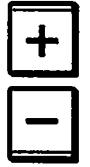
RETURN



## 6 Press CH +/- to select the channel you want to erase.

The channel display appears.

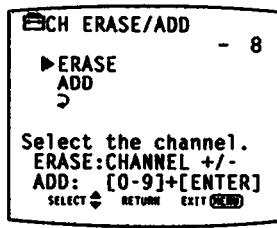
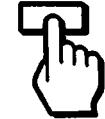
CH



## 7 Press RETURN.

A "-" sign appears in front of the channel number display, indicating that the channel is erased; then the CH ERASE/ADD screen automatically reappears.

RETURN



### To erase another channel

Repeat steps 6 – 7.

### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to " ▷ MENU."

Then press RETURN.

### To return to the main menu

Repeat the above, until you reach the main menu.

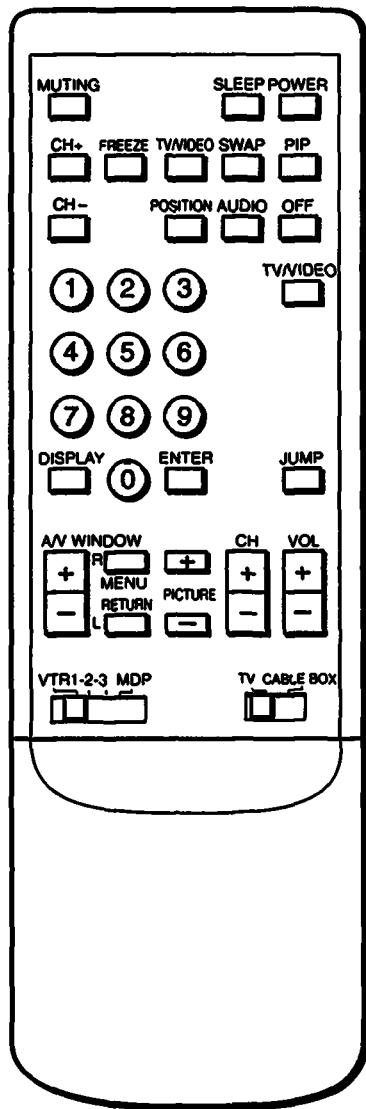
### To return to the normal screen

Press MENU.

#### Note

If you erase a VHF or UHF channel, the same number cable TV channel is also erased (and vice versa).

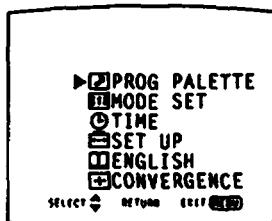
# Presetting TV Channels



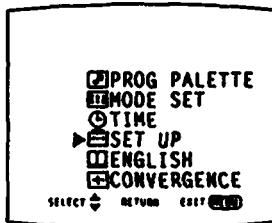
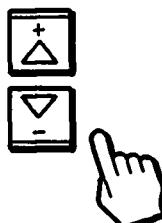
## Adding TV channels

Follow these instructions to add TV channels one by one to the selection memory, or to replace a TV channel you previously erased (pp. 30 – 31).

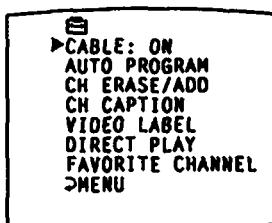
- 1 Press MENU  
The main menu appears.



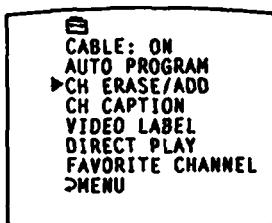
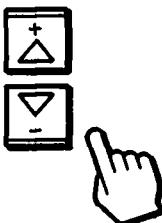
- 2 Press A/V WINDOW +/- until the cursor points to "SET UP."



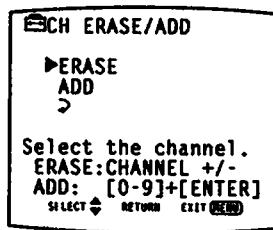
- 3 Press RETURN.  
The set up menu appears.



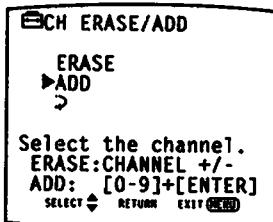
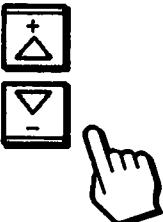
- 4 Press A/V WINDOW +/- until the cursor points to "CH ERASE/ADD."



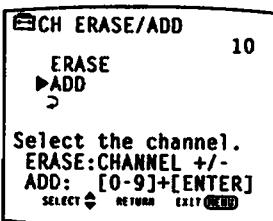
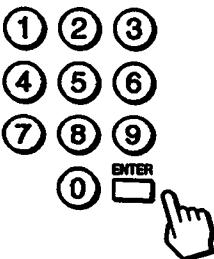
- 5** Press RETURN.  
The CH ERASE/ADD screen appears.



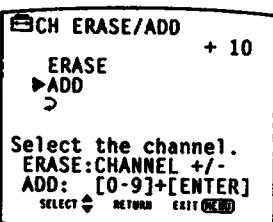
- 6** Press A/V WINDOW +/- until the cursor points to "ADD."



- 7** Press 0 – 9 and ENTER to select the channel you want to add.  
The channel display appears.



- 8** Press RETURN  
A "+" sign appears in front of the channel number display, indicating that the channel is added; then the CH ERASE/ADD screen automatically reappears.



To add another channel  
Repeat steps 7 – 8.

To return to the previous menu  
Press A/V WINDOW +/- until the cursor points to "► MENU."  
Then press RETURN.

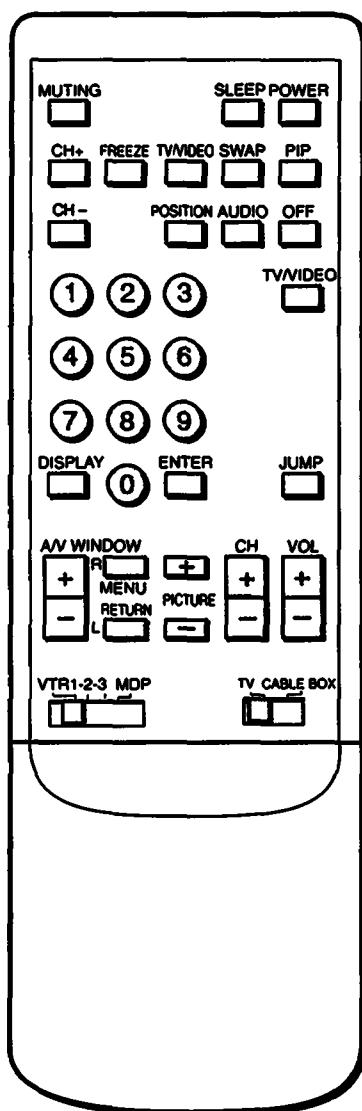
To return to the main menu  
Repeat the above, until you reach the main menu.

To return to the normal screen  
Press MENU.

**Note**  
If you add a VHF or UHF channel, the same number cable TV channel is also added (and vice versa).

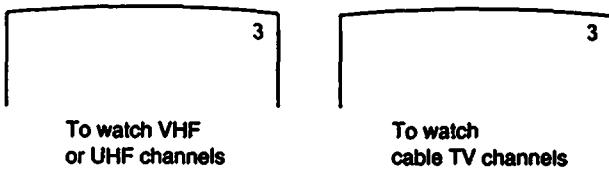
## Chapter 2: Using Basic Features

# Watching TV Programs

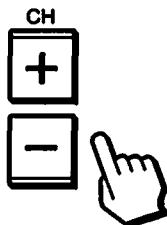


Make sure that the TV/CABLE BOX selector on the Remote Commander is set to TV, in order to control the projection TV with the Remote Commander.

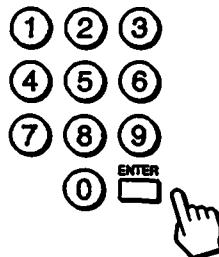
- 1** Set the cable connection on or off (pp. 26 – 27) to select the type of channel you want to watch, VHF/UHF or cable TV.



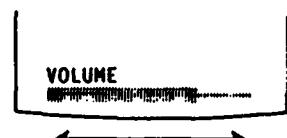
- 2** Select a channel in one of the following two ways:  
To scan the preset channels in numerical sequence, press CH +/–.



To select a channel directly, press 0 – 9 and then ENTER.  
For example, to select channel 10, press 1, 0 and ENTER.



- 3** Press VOL +/– to adjust the volume.



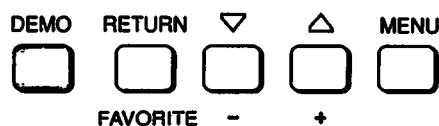
Press + to increase the volume.  
Press – to decrease the volume.

If VIDEO 1, VIDEO 2 or VIDEO 3 appears on the screen  
Press TV/VIDEO until a TV channel number appears.

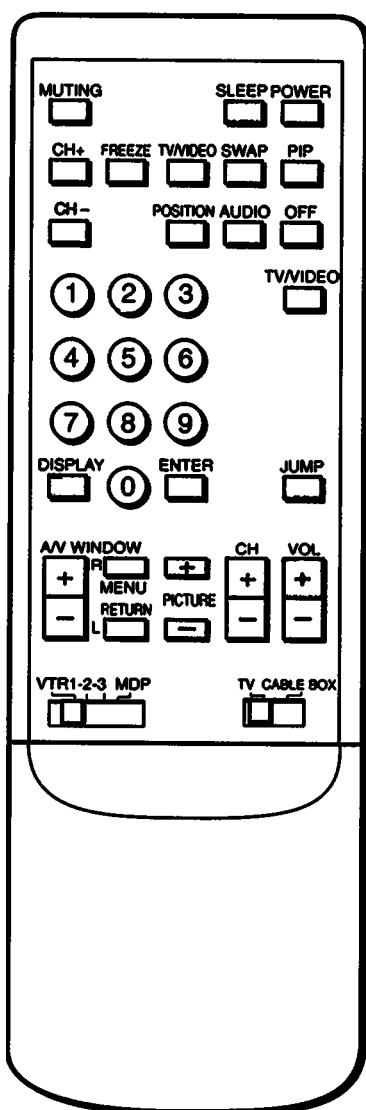
To select channels more easily  
Set FAVORITE CHANNEL (pp. 62 – 63).

To turn off the projection TV  
Press POWER.

# Using Convenient Features



Front inner panel



## Muting the sound — MUTING

Press MUTING.  
*"MUTING" appears on the screen.*



To restore the sound  
Press MUTING again, or press VOL +.

## Keeping the displays on-screen — DISPLAY

Press DISPLAY.  
*All the existing displays appear: channel number, channel caption (if set), MTS mode ("SAP" only), window picture input mode, and the current time ("AM" or "PM" disappears after about three seconds).*

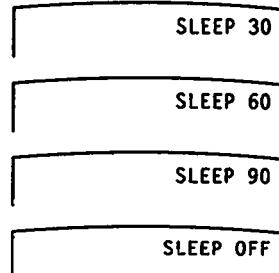


To turn off the displays  
Press DISPLAY again.

## Setting the sleep timer — SLEEP

The sleep timer turns off the projection TV automatically after the amount of time you select.

Press SLEEP.  
*Each time you press SLEEP, the time increments "30," "60," "90" and "OFF" mode appear in sequence.*



A red "SLEEP" display appears about one minute before the projection TV goes off.

To cancel the setting.  
Press SLEEP until OFF mode appears.  
*A green "SLEEP OFF" display appears for about three seconds.*  
OR  
Turn the projection TV off.  
*The sleep timer setting is cancelled.*

## Switching quickly between two channels — JUMP

Use this function to keep track of two programs alternately.

To recall the channel you were watching previously  
Press JUMP.



To switch back to the first channel  
Press JUMP again.

## Previewing the features — DEMO

Press DEMO (front inner panel).  
*Functions and menus are displayed one by one.*



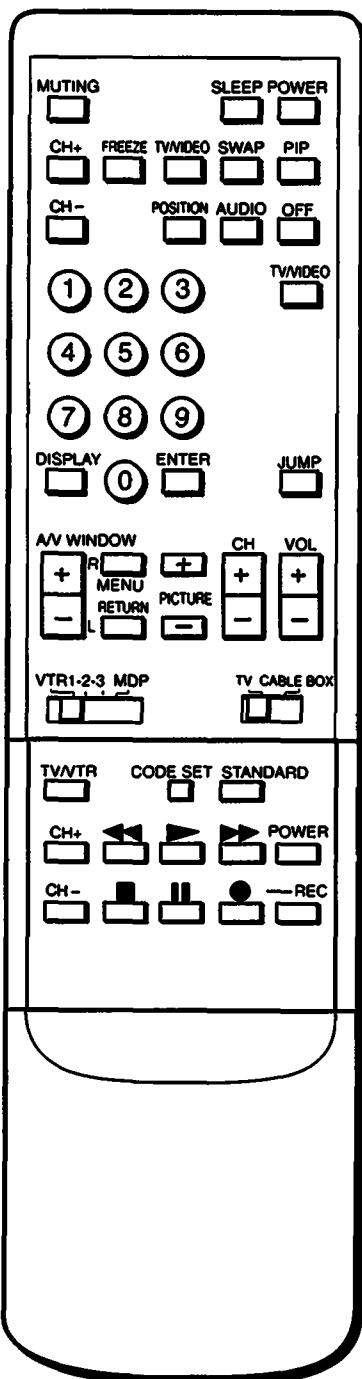
To restart DEMO from the beginning  
Press DEMO again.

To stop DEMO  
Press any button.

# Selecting a Picture and Sound Mode

This projection TV features four modes (STANDARD, MOVIE, SPORTS, NEWS) that offer different picture and sound qualities. Choose the one that best suits the type of program that you want to watch.

**Example:** Select MOVIE mode for picture and sound that gives you the sense of being in a movie theater.



(with video control  
cover open)

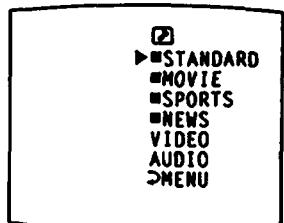
**1** Press MENU.

The main menu appears, and the cursor points to "PROG PALETTE."



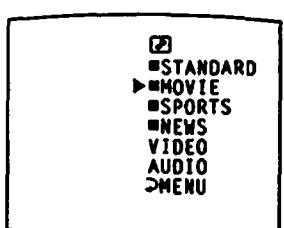
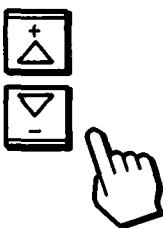
**2** Press RETURN.

The program palette menu appears.



**3**

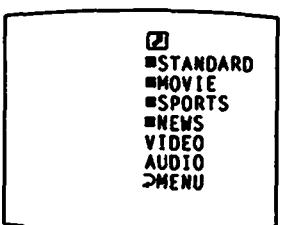
Press A/V WINDOW +/- until the cursor points to "MOVIE."



**4**

Press RETURN.

The "MOVIE" display turns green, indicating that MOVIE mode is selected.



To select a different mode  
Repeat steps 3 – 4.

## Selecting standard mode (without using the menus)

Follow these instructions to select standard mode without using the on-screen menus.

Press STANDARD.

**STANDARD**



### When you select STANDARD mode

You receive standard picture and sound quality. Any video or audio adjustments you made ("Adjusting the Projection TV," pp. 42 – 50) are cancelled and the original factory settings are restored.

### When you select MOVIE mode

You receive a finely detailed picture, and a theatrical audio effect. To further adjust picture and sound qualities, follow the instructions on pp. 42 – 50.

### When you select SPORTS mode

You receive a vivid, bright picture, and sound with a sports stadium effect. To further adjust picture and sound qualities, follow the instructions on pp. 42 – 50.

### When you select NEWS mode

Picture noise is reduced, and you receive clear voice reproduction. To further adjust picture and sound qualities, follow the instructions on pp. 42 – 50.

### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "▷ MENU."

Then press RETURN.

### To return to the main menu

Repeat the above, until you reach the main menu.

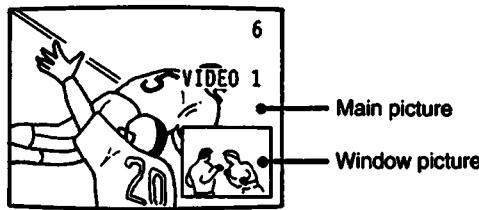
### To return to the normal screen.

Press MENU.

## Watching Two Pictures at Once (PIP)

You can watch both the main picture and a window picture simultaneously, using the Picture-in-Picture (PIP) function.

The projection TV is equipped with one-tuner PIP. To watch two TV channels simultaneously, you must first connect a VCR to the projection TV, which will enable you to watch a second TV channel through the VCR tuner. (See "Connecting Other Equipment," pp. 15 – 16.)



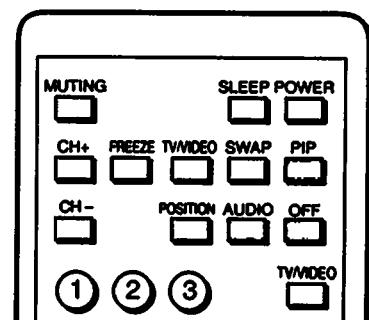
### Picture-in-Picture special features

When watching the main picture and a window picture, you can:

- Swap the main and window pictures (SWAP).
- Change the position of the window picture (POSITION).
- Display a still picture (FREEZE).
- Choose the sound from the main or window picture (AUDIO).

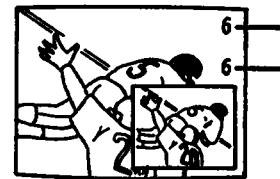
### Displaying a window picture

#### Remote Commander



Press PIP to display a window picture

Input source mode or TV channel for the main picture



1/4-size

Input source mode or TV channel for the window picture



1/9-size

A window picture appears in the last mode you watched.  
Each time you press PIP, a 1/4 or 1/9 size window picture appears alternately.

#### To turn PIP function off

Press OFF.

The window picture disappears.

#### To receive the window picture sound

Press AUDIO.

The  $\triangleright$  display appears for a few seconds, indicating that the window picture sound is being received.

#### To restore the main picture sound

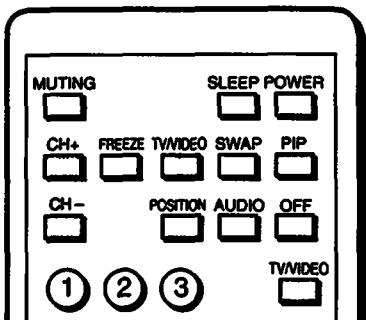
Press AUDIO again.

### Notes

- The window picture sound is also output from the AUDIO (VAR) OUT jacks. The AUDIO OUT and MONITOR OUT jacks output the main picture sound only.
- The video label and channel caption will not appear with the window picture even if you have set them.
- If you select a blocked channel in the window picture, the display "BLOCKED" appears with the window picture. (See "Setting CHANNEL BLOCK," pp. 60 – 61.)

## Changing the window picture input mode

### Remote Commander

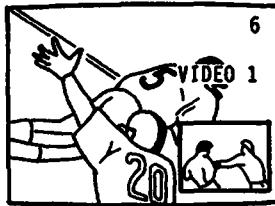


**1** Press PIP to display a window picture.



**2** Press TV/VIDEO in the Picture-in-Picture control area to select the input mode.

Each time you press TV/VIDEO, "TV," "VIDEO 1," "VIDEO 2" and "VIDEO 3" appear in sequence.



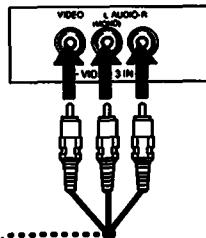
To change TV channels in the window picture

Press CH +/- in the PIP control area.

## Displaying CATV input as a window picture

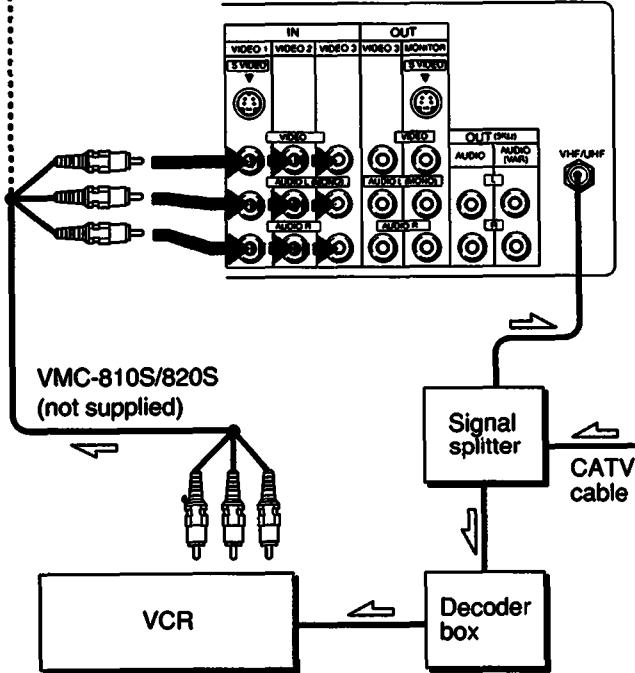
To use Picture-in-Picture with pay cable TV input, make the connections to your cable converter box as shown below.

(Front inner panel)



→ : Signal flow

(Rear of projection TV)



VMC-810S/820S  
(not supplied)

After making the above connections, turn the cable connection on by following the steps on pp. 26 – 27; then continue with the steps below.

**1–2** Follow steps 1 – 2 in "Changing the window picture input mode" on this page to select the video input mode for your connected VCR.

**3** Put your VCR on an inactive channel (channel 3 or 4).

**4** Change pay cable TV channels with the decoder box.

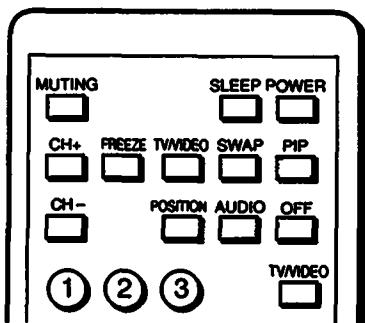
To control your cable converter box with the supplied  
Remote Commander  
See p. 68.

## Watching Two Pictures at Once (PIP)

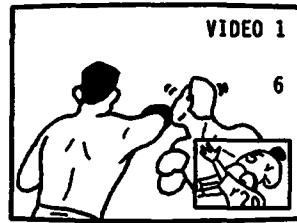
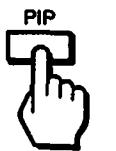
### Changing the position of the window picture

Follow these instructions to change the position of the window picture on the screen.

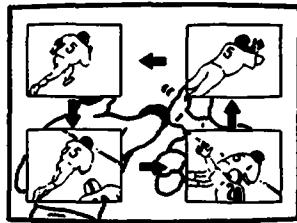
#### Remote Commander



- 1 Press PIP to display a window picture.



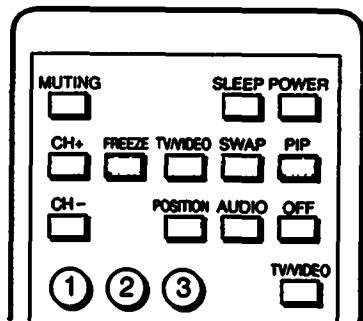
- 2 Press POSITION.  
*Each time you press POSITION, the window picture moves as illustrated.*



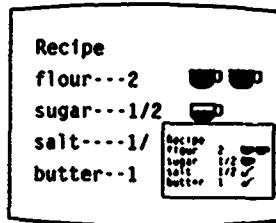
### Displaying a still picture

Use the FREEZE function to display a still picture. This function is useful when you want to write down a recipe from a cooking program, a displayed address or phone number and so on.

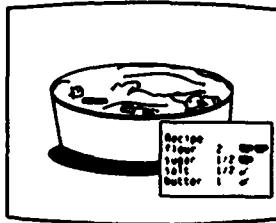
#### Remote Commander



- 1 Press PIP to display a window picture.



- 2 Press FREEZE.  
*The window picture image remains still on the screen.*

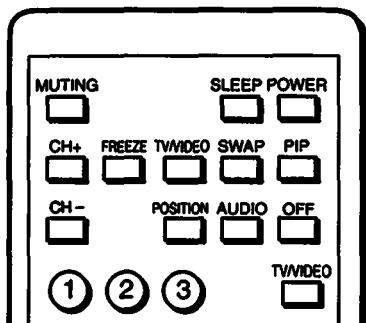


To restore the normal picture  
Press FREEZE again.

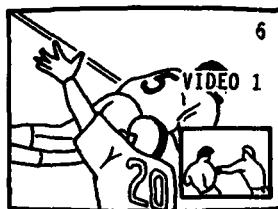
## Swapping the main and window pictures

Follow these instructions to swap the input signals of the main and window pictures.

### Remote Commander



- 1 Press PIP to display a window picture.



- 2 Press SWAP.  
*Each time you press SWAP, the images from the main and window pictures switch places.*



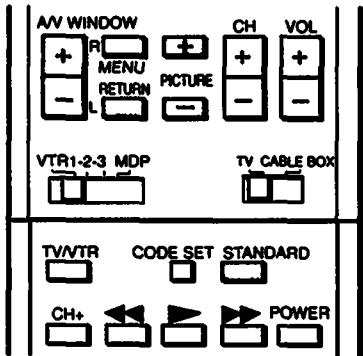
# Adjusting the Projection TV

You can adjust the picture and sound for each input mode (TV, VIDEO 1, VIDEO 2, VIDEO 3) by pressing TV/VIDEO on the projection TV or on the Remote Commander to select the input mode, before making the adjustments. These adjustments are retained in memory even when you turn off the projection TV, but are cancelled after you change the adjustments, or select a picture and sound mode (pp. 36 – 37).

## Adjusting the picture

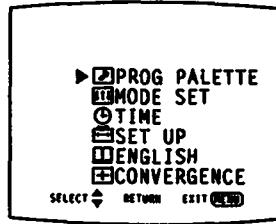
Follow these instructions to adjust PICTURE, HUE, COLOR, BRIGHT (brightness) and SHARP (sharpness).

Remote Commander (with video control cover open)



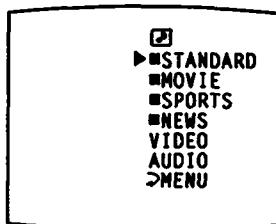
**1** Press MENU.

The main menu appears, and the cursor points to "PROG PALETTE."



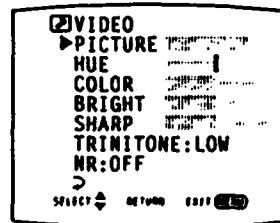
**2** Press RETURN.

The program palette menu appears.



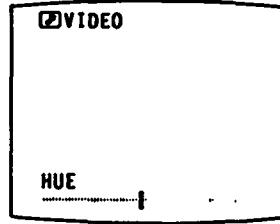
**3** Press A/V WINDOW +/- until the cursor points to "VIDEO."

**4** Press RETURN.  
The VIDEO screen appears.



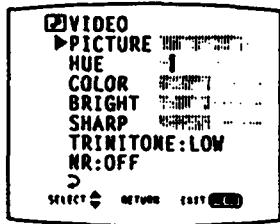
**5** Press A/V WINDOW +/- until the cursor points to the item you want to adjust.

**6** Press RETURN.  
The adjustment screen appears.



**7** Press A/V WINDOW +/- to make the adjustment.

**8** Press RETURN.  
The adjustment is complete, and the VIDEO screen automatically reappears.



**To adjust other items**

Repeat steps 5 – 8.

**To restore the factory settings for all the items**

Select "STANDARD" on the program palette menu, and

press RETURN;

or, press STANDARD on the Remote Commander.

*All the items, including TRINITONE (p. 44) and NR (p. 45) return to their original factory settings.*

**To adjust picture contrast**

You can also adjust picture contrast with the PICTURE +/– buttons on the Remote Commander.



Press + to increase picture contrast with vivid color.

Press – to decrease picture contrast with soft color.

*The picture adjustment screen appears.*

**To return to the previous menu**

Press A/V WINDOW +/- until the cursor points to

"▷ MENU."

Then press RETURN.

**To return to the main menu**

Repeat the above, until you reach the main menu.

**To return to the normal screen**

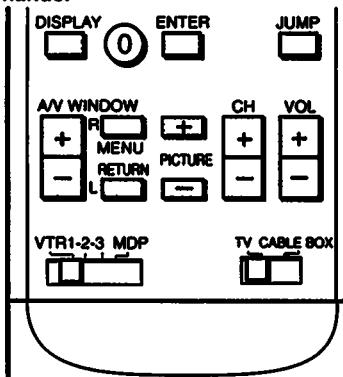
Press MENU.

# Adjusting the Projection TV

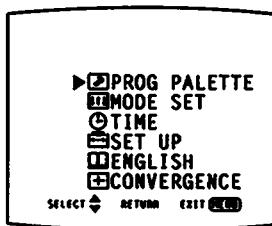
## Setting the TRINITONE mode

Color picture tubes are usually manufactured with a fixed color temperature (tint) that determines the "warmth" (red tint) or "coolness" (blue tint) of the picture. Use the Sony Trinitone feature to adjust the picture color to your preference.

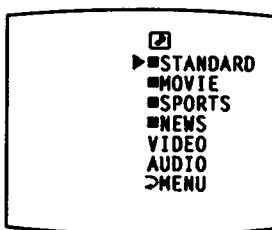
### Remote Commander



- 1** Press MENU.  
*The main menu appears, and the cursor points to "PROG PALETTE."*

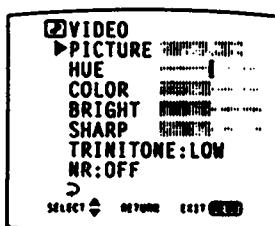


- 2** Press RETURN.  
*The program palette menu appears.*



- 3** Press A/V WINDOW +/- until the cursor points to "VIDEO."

- 4** Press RETURN.  
*The VIDEO screen appears.*



- 5** Press A/V WINDOW +/- until the cursor points to "TRINITONE."

- 6** Press RETURN.  
*The mode display turns red.*

- 7** Press A/V WINDOW +/- to select "HIGH" or "LOW."

Select "HIGH" to make the picture cool (bluish).  
Select "LOW" to make the picture warm (reddish).

- 8** Press RETURN.  
*The setting is complete.*

### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to " MENU." Then press RETURN.

### To return to the main menu

Repeat the above, until you reach the main menu.

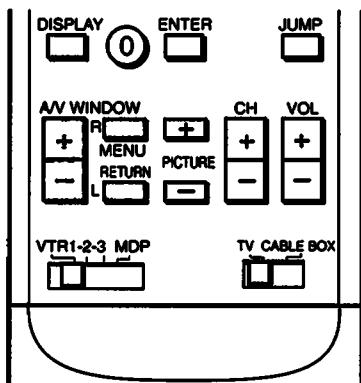
### To return to the normal screen

Press MENU.

## Setting NR (picture noise reduction) ON or OFF

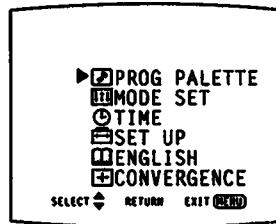
Follow these instructions to reduce picture noise.

### Remote Commander



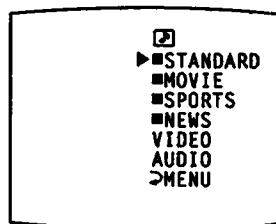
#### 1 Press MENU.

The main menu appears, and the cursor points to "PROG PALETTE."



#### 2 Press RETURN.

The program palette menu appears.

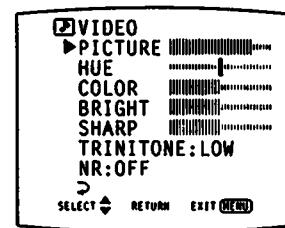


#### 3 Press A/V WINDOW +/- until the cursor points to "VIDEO."

#### 4 Press RETURN.

The VIDEO screen appears.

#### 5 Press A/V WINDOW +/- until the cursor points to "NR."



#### 6 Press RETURN.

The mode display turns red.

#### 7 Press A/V WINDOW +/- to select "ON" or "OFF."

Select "ON" to reduce picture noise.  
Select "OFF" to restore the normal picture.

#### 8 Press RETURN.

The setting is complete.

#### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to " MENU."

Then press RETURN.

#### To return to the main menu

Repeat the above, until you reach the main menu.

#### To return to the normal screen

Press MENU.

# Adjusting the Projection TV

## Setting S-VIDEO ON or OFF

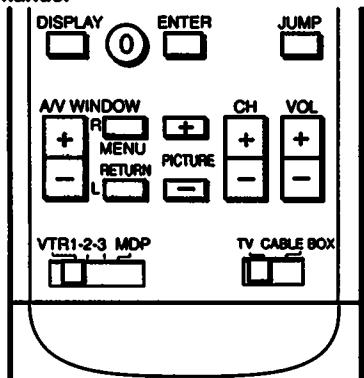
Follow these instructions to set S-VIDEO on or off, depending on the kind of video equipment you have connected to the projection TV. For instructions on connecting video equipment, see pp. 15 – 18.

### Note

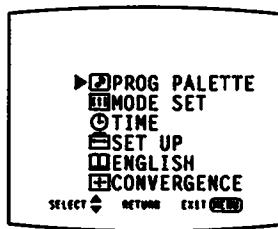
If the projection TV is in TV, VIDEO 2 or VIDEO 3 mode, the "S-VIDEO" display is shaded and cannot be selected.

Press TV/VIDEO on the projection TV or on the Remote Commander to change to VIDEO 1 mode.

### Remote Commander

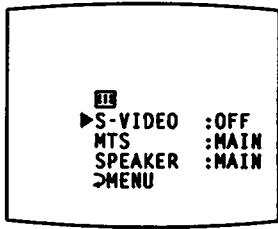


- 1** Press MENU.  
*The main menu appears.*



- 2** Press A/V WINDOW +/- until the cursor points to "MODE SET."

- 3** Press RETURN.  
*The mode set menu appears, with the cursor pointing to "S-VIDEO."*



- 4** Press RETURN.  
*The mode display turns red.*

- 5** Press A/V WINDOW +/- to select "ON" or "OFF."

- 6** Press RETURN.  
*The setting is complete.*

### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "▷ MENU."

Then press RETURN.

### To return to the main menu

Repeat the above, until you reach the main menu.

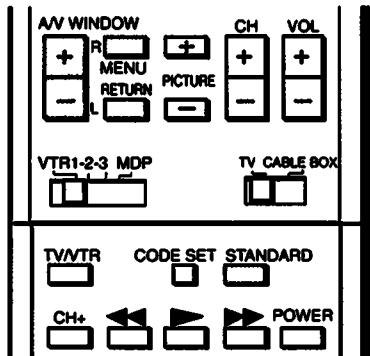
### To return to the normal screen

Press MENU.

## Adjusting the sound

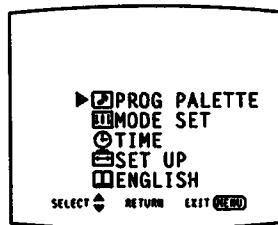
Follow these instructions to adjust the TREBLE, BASS and BALANCE.

Remote Commander (with video control cover open)



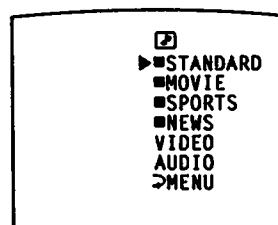
**1** Press MENU.

The main menu appears, and the cursor points to "PROG PALETTE."



**2** Press RETURN.

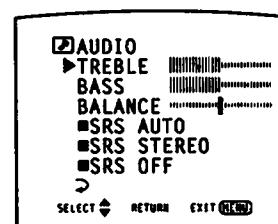
The program palette menu appears.



**3** Press A/V WINDOW +/- until the cursor points to "AUDIO."

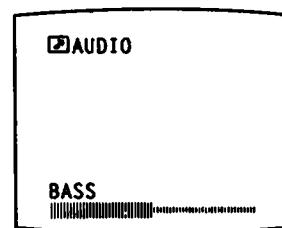
**4** Press RETURN.

The AUDIO screen appears.



**5** Press A/V WINDOW +/- until the cursor points to the item you want to adjust.

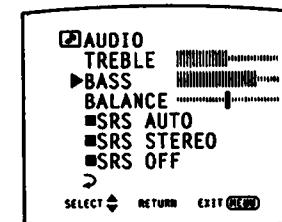
**6** Press RETURN.  
The adjustment screen appears.



**7** Press A/V WINDOW +/- to make the adjustment.

Sound quality	Press A/V WINDOW -	Press A/V WINDOW +
TREBLE	To decrease the treble response	To increase the treble response
BASS	To decrease the bass response	To increase the bass response
BALANCE	To emphasize the left speaker's volume	To emphasize the right speaker's volume

**8** Press RETURN.  
The adjustment is complete, and the AUDIO screen automatically reappears.



To adjust other items  
Repeat steps 5 – 9.

To restore the factory settings for all the items  
Select "STANDARD" on the program palette menu, and press RETURN; or, press STANDARD on the Remote Commander.

All the items, including SRS mode (p. 48) return to their original factory settings.

To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "▷ MENU."

Then press RETURN.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

Press MENU.

# Adjusting the Projection TV

## Selecting an SRS (Sound Retrieval System) mode

For lifelike sound reproduction, follow the instructions below to select the SRS mode you prefer.

In SRS AUTO mode, SRS functions in both monaural and stereo modes.

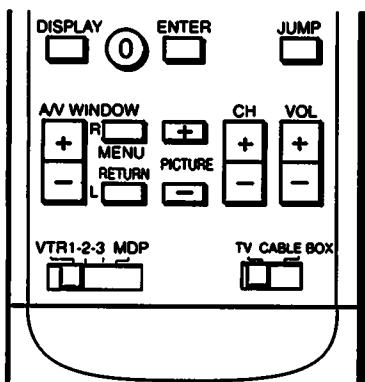
Monaural sound programs will have a 'simulated stereo' effect.

In SRS STEREO mode, SRS functions only when a stereo program is received.

The *STEREO* lamp on the TV lights up whenever a stereo broadcast is received.

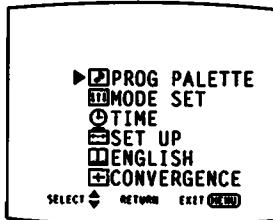
Select SRS OFF mode to return to normal sound mode.

### Remote Commander



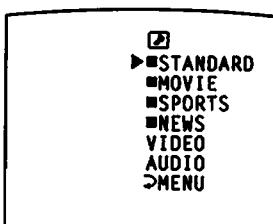
### 1 Press MENU.

*The main menu appears, and the cursor points to "PROG PALETTE."*



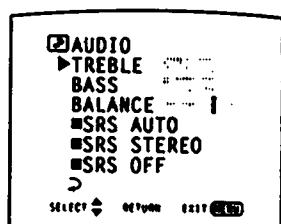
### 2 Press RETURN.

*The program palette menu appears.*



### 3 Press A/V WINDOW +/- until the cursor points to "AUDIO."

### 4 Press RETURN. *The AUDIO screen appears.*



### 5 Press A/V WINDOW +/- until the cursor points to the SRS mode you want.

### 6 Press RETURN. *The mode is selected.*

### To change the SRS mode Repeat steps 5 – 6.

### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "*> MENU.*"

Then press RETURN.

### To return to the main menu

Repeat the above, until you reach the main menu.

### To return to the normal screen

Press MENU.

## Selecting an MTS (Multichannel TV Sound) mode

Follow these instructions to select an MTS mode.

Select MAIN mode to listen to stereo sound.

The STEREO lamp on the projection TV lights up whenever a stereo broadcast is received.

Select SAP mode to listen to Second Audio Programs.

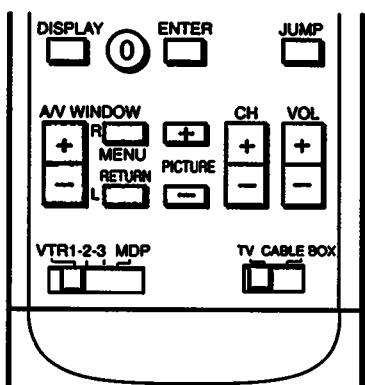
Select MONO mode to eliminate excessive noise during stereo broadcasts, caused by a weak incoming signal.

### Note

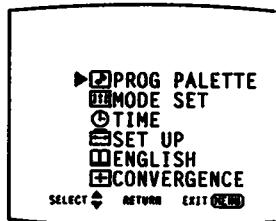
If the projection TV is in video mode, the "MTS" display is shaded and cannot be selected.

Press TV/VIDEO on the projection TV or on the Remote Commander to change to TV mode.

### Remote Commander

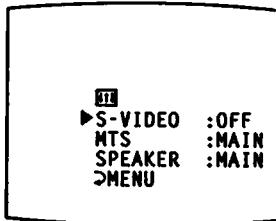


**1** Press MENU.  
*The main menu appears.*



**2** Press A/V WINDOW +/- until the cursor points to "MODE SET."

**3** Press RETURN.  
*The mode set menu appears.*



**4** Press A/V WINDOW +/- until the cursor points to "MTS."

**5** Press RETURN.  
*The mode display turns red.*

**6** Press A/V WINDOW +/- to select the mode you want.  
*Each time you press A/V WINDOW +/-, "MAIN," "SAP" and "MONO" appear in sequence.*

**7** Press RETURN.  
*The mode is selected.*

### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "▷ MENU."

Then press RETURN.

### To return to the main menu

Repeat the above, until you reach the main menu.

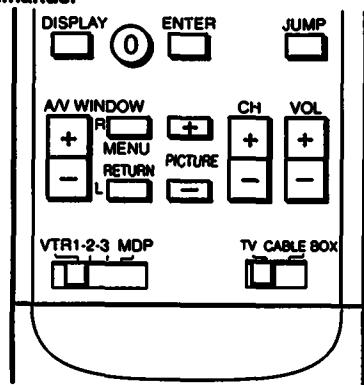
**To return to the normal screen**  
Press MENU.

# Adjusting the Projection TV

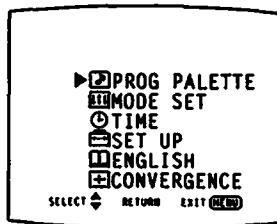
## Setting SPEAKER — MAIN or CENTER

Follow these instructions to set SPEAKER to "CENTER" when you connect an audio system (p.19), and to "MAIN" when you want to listen to the sound from the projection TV speakers.

Remote Commander

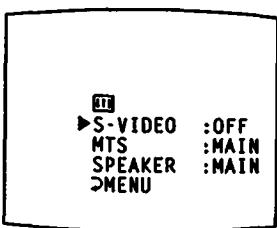


- 1** Press MENU.  
*The main menu appears.*



- 2** Press A/V WINDOW +/- until the cursor points to "MODE SET."

- 3** Press RETURN.  
*The mode set menu appears.*



- 4** Press A/V WINDOW +/- until the cursor points to "SPEAKER."

- 5** Press RETURN.  
*The mode display turns red.*

- 6** Press A/V WINDOW +/- to select "MAIN" or "CENTER."

- 7** Press RETURN.  
*The setting is complete.*

To return to the previous menu  
Press A/V WINDOW +/- until the cursor points to " $\triangleright$  MENU."  
Then press RETURN.

To return to the main menu  
Repeat the above, until you reach the main menu.

To return to the normal screen  
Press MENU.

# Customizing the Screen Display

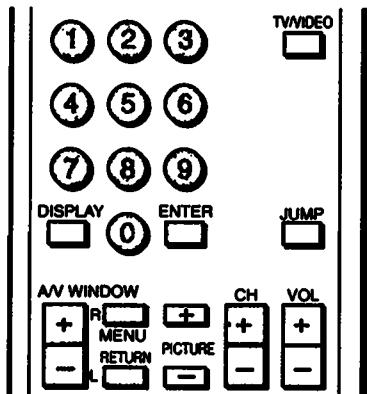


## Setting channel captions — CH CAPTION

Follow these instructions to caption each channel number display with a name, for instance, the television station call letters. (You can set up to four letters or numbers).

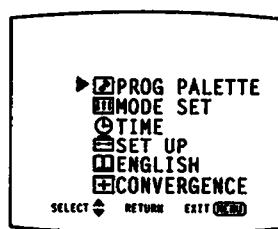
**Example:** Caption channel 15 as "NBC."

### Remote Commander



#### 1 Press MENU.

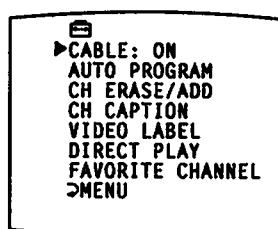
The main menu appears.



#### 2 Press A/V WINDOW +/- until the cursor points to "SET UP."

#### 3 Press RETURN.

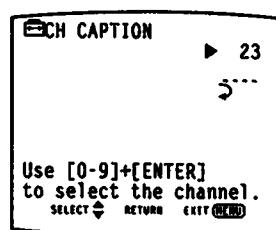
The set up menu appears.



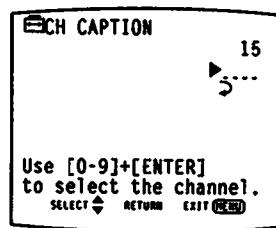
#### 4 Press A/V WINDOW +/- until the cursor points to "CH CAPTION."

#### 5 Press RETURN.

The CH CAPTION screen appears.



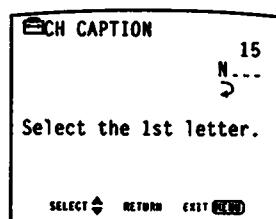
#### 6 Press CH +/-, or press 1, 5 and ENTER to set channel "15."



#### 7 Press RETURN.

The first caption space turns red.

#### 8 Press A/V WINDOW +/- to select "N." Each time you press A/V WINDOW +/-, "0" - "9," "A" - "Z," "&," "/", "-" and "\_" (blank space) appear in sequence.



#### 9 Press RETURN.

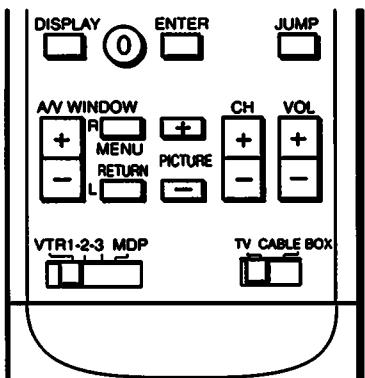
The second caption space turns red.

(Continued)

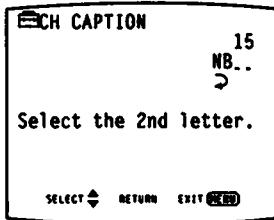
## Customizing the Screen Display

Setting channel captions – CH CAPTION  
(Cont'd. from prev. page)

Remote Commander

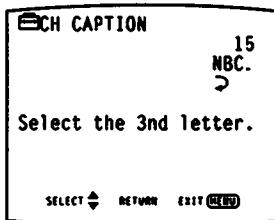


**10** Press A/V WINDOW +/- to select "B."



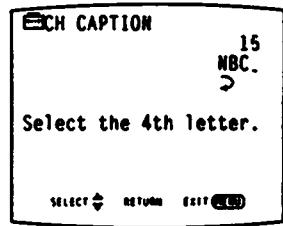
**11** Press RETURN.  
The third caption space turns red.

**12** Press A/V WINDOW +/- to select "C."



**13** Press RETURN.  
The fourth caption space turns red.

**14** Press A/V WINDOW +/- to select a blank space.



**15** Press RETURN.  
The setting is complete.  
When you select or display the channel number, the channel caption also appears.

**To caption more channels**

Repeat steps 6 – 15.

**To erase unnecessary captions**

Display the CH CAPTION screen, select the channel with the caption you want to erase, and select blank spaces for the channel caption; then press RETURN.  
The caption for that channel is erased.

**To return to the previous menu**

Press A/V WINDOW +/- until the cursor points to "► MENU."

Then press RETURN.

**To return to the main menu**

Repeat the above, until you reach the main menu.

**To return to the normal screen**

Press MENU.

**Note**

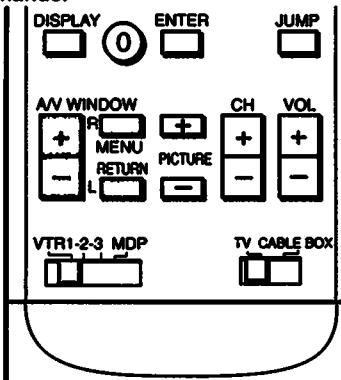
You can set up to 32 channel captions. If the memory is full, "The memory is full, sorry" appears on the screen. Erase any unnecessary captions, and begin again.

## Setting VIDEO LABEL

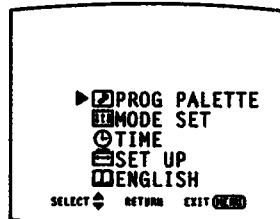
Follow these instructions to label each input mode, in order to identify the equipment connected to each input terminal.

**Example:** Label VIDEO 1 IN as "VHS."

**Remote Commander**

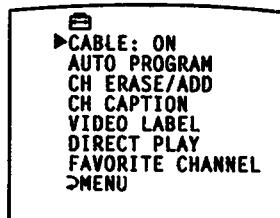


**1** Press MENU.  
The main menu appears.



**2** Press A/V WINDOW +/- until the cursor points to "SET UP."

**3** Press RETURN.  
The set up menu appears.



**4** Press A/V WINDOW +/- until the cursor points to "VIDEO LABEL."

**5** Press RETURN.  
The VIDEO LABEL screen appears.



**6** Press A/V WINDOW +/- until the cursor points to the input mode you want to label. (In this case, the cursor is already pointing to "VIDEO 1.")

**7** Press RETURN.  
The label display turns red.

**8** Press A/V WINDOW +/- to select "VHS."



Each time you press A/V WINDOW +/-, the label changes:

**VIDEO 1**  
VIDEO 1 → BETA → 8mm → VHS → LD → S-VIDEO

**VIDEO 2**  
VIDEO 2 → BETA → 8mm → VHS → LD

**VIDEO 3**  
VIDEO 3 → BETA → 8mm → VHS → LD

**9** Press RETURN.  
The setting is complete.  
When you select or display the video mode, the video label appears.

To label other input modes

Repeat steps 6 – 9.

To change a label

Same as above.

To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "→ MENU."

Then press RETURN.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

Press MENU.

# Using Timer-Activated Functions

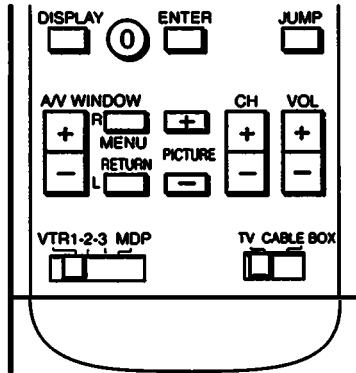
## Setting DAYLIGHT SAVING

If you live in an area that uses daylight savings time, set DAYLIGHT SAVING to "YES" or "NO" depending on the season, before setting the current time. At the next daylight savings date, you will be able to automatically adjust all the time-related settings (CURRENT TIME, ON/OFF TIMER and CHANNEL BLOCK) simply by changing the DAYLIGHT SAVING setting.

### When setting DAYLIGHT SAVING:

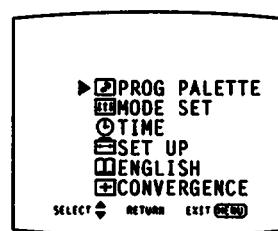
- After the first Sunday in April (spring daylight savings)  
Set to "YES" before setting the current time.  
Then, on the last Sunday in October (fall daylight savings), set to "NO."  
*All the time-related settings automatically move one hour back.*
- After the last Sunday in October (fall daylight savings)  
Set to "NO" before setting the current time.  
Then, on the first Sunday in April (spring daylight savings), set to "YES."  
*All the time-related settings automatically move one hour ahead.*

### Remote Commander



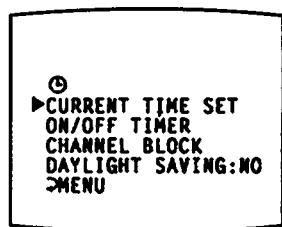
Follow these instructions to set DAYLIGHT SAVING to "YES" or "NO."

- 1** Press MENU.  
*The main menu appears.*



- 2** Press A/V WINDOW +/- until the cursor points to "TIME."

- 3** Press RETURN.  
*The time menu appears.*



- 4** Press A/V WINDOW +/- until the cursor points to "DAYLIGHT SAVING."

- 5** Press RETURN.  
*The mode display turns red.*

- 6** Press A/V WINDOW +/- to select "YES" or "NO."

- 7** Press RETURN.  
*The setting is complete.*

**To return to the previous menu**  
Press A/V WINDOW +/- until the cursor points to "MENU."  
Then press RETURN.

**To return to the main menu**  
Repeat the above, until you reach the main menu.

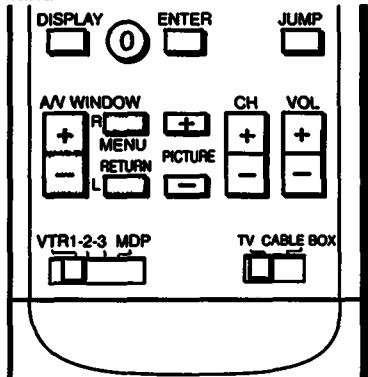
**To return to the normal screen.**  
Press MENU.

## Setting the clock — CURRENT TIME SET

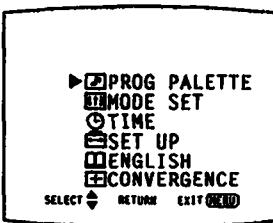
Follow these instructions to set the current time. The correct current time must be set in order to use the other time-related functions (DAYLIGHT SAVING, ON/OFF TIMER, CHANNEL BLOCK).

**Example:** Set the time to 3:15 PM, Monday.

### Remote Commander

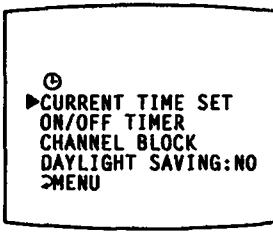


- 1** Press MENU.  
The main menu appears.

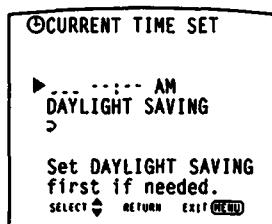


- 2** Press A/V WINDOW +/- until the cursor points to "TIME."

- 3** Press RETURN.  
The time menu appears, and the cursor points to "CURRENT TIME SET."



- 4** Press RETURN again.  
The CURRENT TIME SET screen appears, with a reminder to set DAYLIGHT SAVING.



If you do not need to set DAYLIGHT SAVING, press RETURN and continue from step 5.

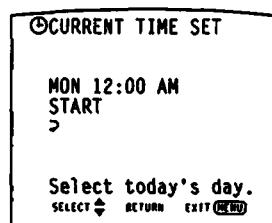
### To set daylight saving

- Press A/V WINDOW +/- until the cursor points to "DAYLIGHT SAVING."
- Press RETURN.  
The time menu appears, and the cursor points to "DAYLIGHT SAVING."
- Press RETURN.
- Press A/V WINDOW +/- to select "YES" or "NO."
- Press RETURN.  
The setting is complete.

To set the time, press A/V WINDOW +/- until the cursor points to "CURRENT TIME SET"; press RETURN, then continue from step 5.

- 5** Press RETURN.  
The CURRENT TIME SET screen appears, and the "SUN" display appears (red).

- 6** Press A/V WINDOW +/- to select "MON."  
Each time you press A/V WINDOW +/-, the day changes consecutively.

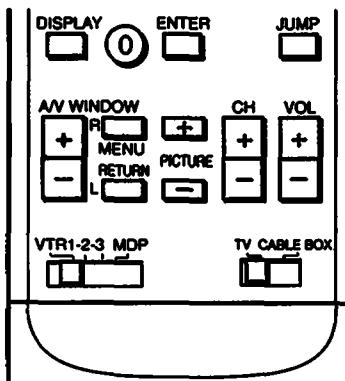


(Continued)

# Using Timer-Activated Functions

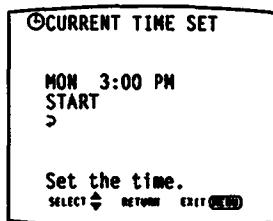
## Setting the clock — CURRENT TIME SET (Cont'd. from prev. page)

### Remote Commander



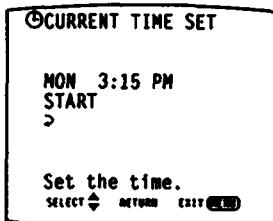
**7** Press RETURN.  
The hour and am/pm displays turn red.

**8** Press A/V WINDOW +/- to set "3:00PM."  
Each time you press A/V WINDOW +/-, the hour changes in sequence beginning with "12:00AM."



**9** Press RETURN.  
The minute display turns red.

**10** Press A/V WINDOW +/- to select "15" (minutes).  
Each time you press A/V WINDOW +/-, the minutes change in sequence.



**11** Press RETURN.  
The cursor points to "START."

**12** Check the actual time, and press RETURN to start the clock.  
The setting is complete.

### To reset the time

Display the CURRENT TIME SET screen and repeat steps 5 – 12.

### To display the current time

Press DISPLAY.

### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "→ MENU."

Then press RETURN.

### To return to the main menu

Repeat the above, until you reach the main menu.

### To return to the normal screen.

Press MENU.

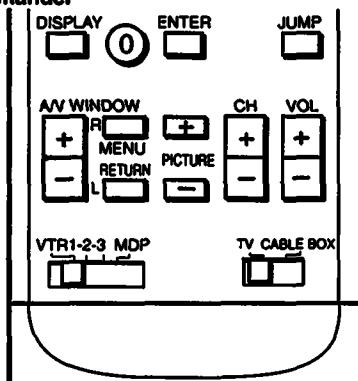


## Setting the ON/OFF TIMER

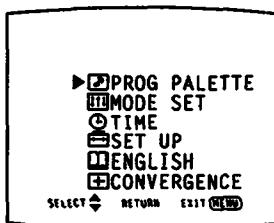
Follow these instructions to make the program of your choice appear on the screen at a specified time.

**Example:** Set the timer to turn on the projection TV every Monday through Friday at 1:30 AM for 3 hours, on channel 8, as PROGRAM 1. (You can set up to three programs.)

### Remote Commander

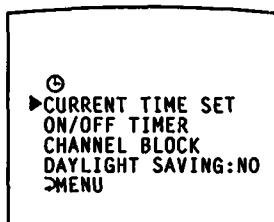


**1** Press MENU.  
The main menu appears.



**2** Press A/V WINDOW +/- until the cursor points to "TIME."

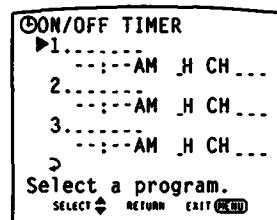
**3** Press RETURN.  
The time menu appears.



**4** Press A/V WINDOW +/- until the cursor points to "ON/OFF TIMER."

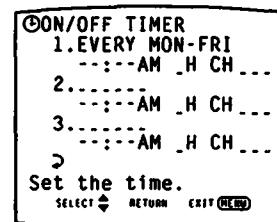
**5** Press RETURN.

The ON/OFF TIMER screen appears, and the cursor points to "1."

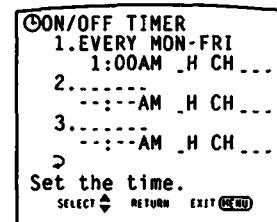


**6** To set program 1, press RETURN.  
(To set program 2 or 3, press A/V WINDOW +/- until the cursor points to that program; then press RETURN.)  
*The day input space turns red.*

**7** Press A/V WINDOW +/- to select "EVERY MON-FRI"; then press RETURN.  
*Each time you press A/V WINDOW +/-, the days of the week change as shown in Fig. 1 (p. 59).*



**8** Press A/V WINDOW +/- to select "1:00AM"; then press RETURN.  
*Each time you press A/V WINDOW +/-, the hour changes in sequence.*

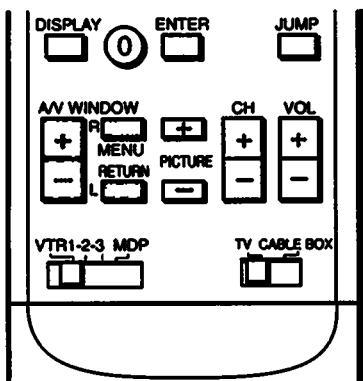


(Continued)

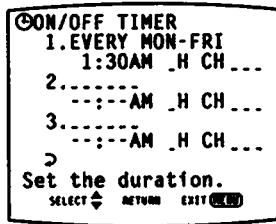
# Using Timer-Activated Functions

## Setting the ON-OFF TIMER (Cont'd from prev. page)

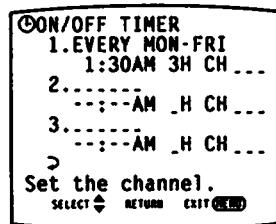
### Remote Commander



- 9** Press A/V WINDOW +/- to select "30" (minutes); then press RETURN.  
*Each time you press A/V WINDOW +/-, the minutes change in sequence.*



- 10** Press A/V WINDOW +/- to select "3" (hour duration); then press RETURN.  
*Each time you press A/V WINDOW +/-, the duration changes from "1" - "6" in sequence.*

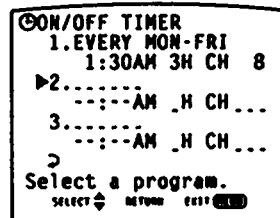


**11**

Press A/V WINDOW +/- to select "8" (channel); then press RETURN.

The TIMER lamp lights, indicating that the setting is complete.

Each time you press A/V WINDOW +/-, the channel number changes from 1 - 125 in sequence.



The display "TIMER WILL BE OFF" appears on the screen one minute before the timer duration ends.

### To set program 2 or 3.

Press RETURN and repeat steps 6 - 11.

### To erase an ON/OFF TIMER setting

Display the ON/OFF TIMER screen, select the setting you want to erase, and select a blank space for the day. The ON/OFF TIMER setting is erased.

### To enter a new ON/OFF TIMER setting

Display the ON/OFF TIMER screen and repeat steps 6 - 11.

### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "► MENU."

Then press RETURN.

### To return to the main menu

Repeat the above, until you reach the main menu.

### To return to the normal screen.

Press MENU.

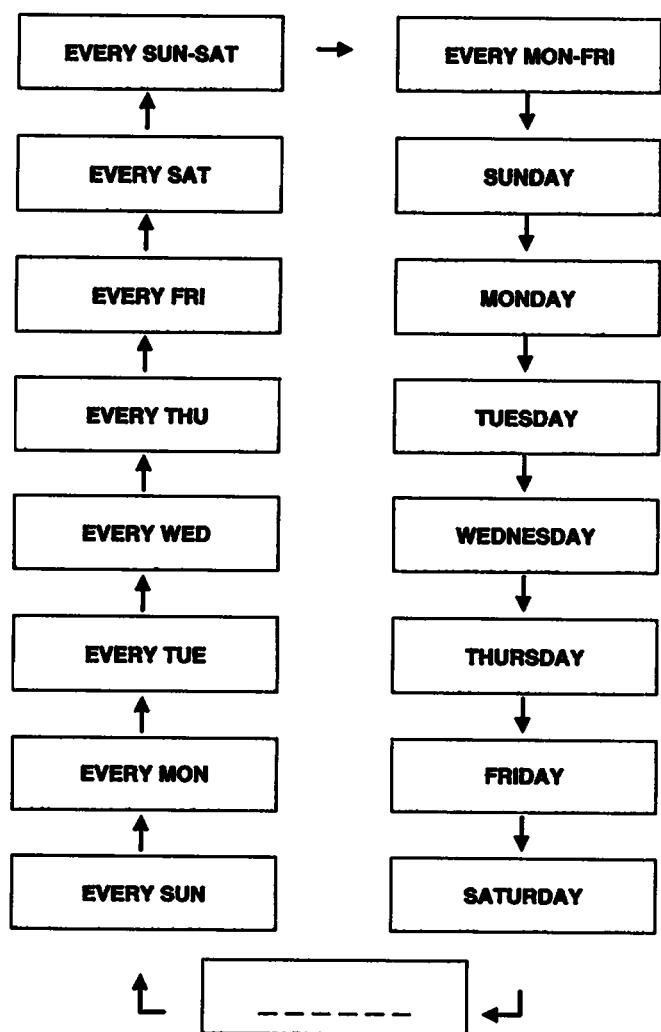
### Note

If you unplug the projection TV or a power failure occurs, both the clock and timer settings will be erased. Reset the current time; then set the timer.

**Fig. 1**

**Selecting the day(s) of the week**

When you press A/V WINDOW +, the days of the week appear in the following order:



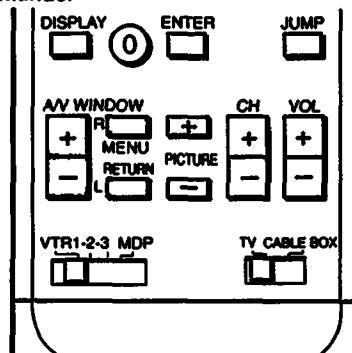
# Using Timer-Activated Functions

## Setting CHANNEL BLOCK

Follow these instructions to prevent a channel from appearing on the screen during the time that you specify. You can use this function to prevent children from watching unsuitable programs.

**Example:** Set CHANNEL BLOCK every Saturday at 4:30 PM for 1 hour, on Channel 12.

### Remote Commander



#### Note

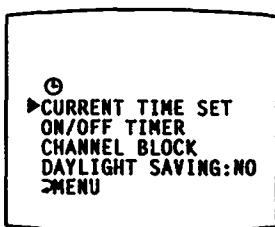
If you have not set the current time, the "CHANNEL BLOCK" display is shaded and cannot be selected.

**1** Press MENU.  
The main menu appears.



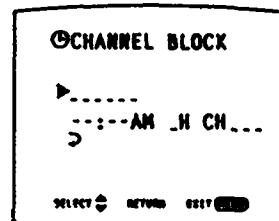
**2** Press A/V WINDOW +/- until the cursor points to "TIME."

**3** Press RETURN.  
The time menu appears.

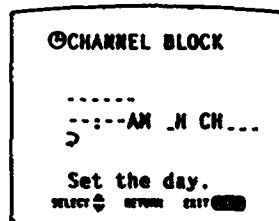


**4** Press A/V WINDOW +/- until the cursor points to "CHANNEL BLOCK."

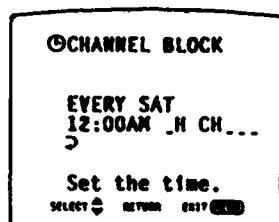
**5** Press RETURN.  
The CHANNEL BLOCK screen appears, and the cursor points to the day input space.



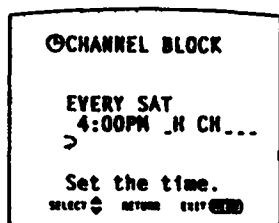
**6** Press RETURN.  
The day input space turns red.



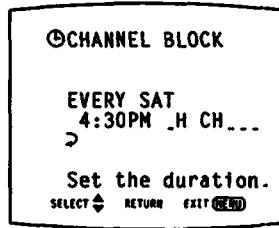
**7** Press A/V WINDOW +/- to select "EVERY SAT"; then press RETURN.  
Each time you press A/V WINDOW +/-, the days of the week change as shown in Fig. 1 (p. 59).



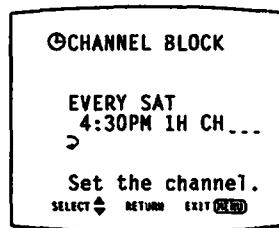
**8** Press A/V WINDOW +/- to select "4:00PM"; then press RETURN.  
Each time you press A/V WINDOW +/-, the hour changes in sequence.



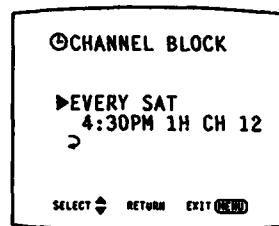
- 9** Press A/V WINDOW +/- to select "30" (minutes); then press RETURN.  
*Each time you press A/V WINDOW +/-, the minutes change in sequence.*



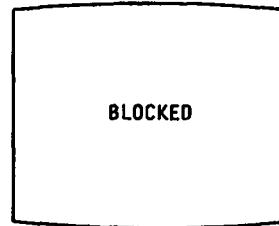
- 10** Press A/V WINDOW +/- to select "1" (hour duration); then press RETURN.  
*Each time you press A/V WINDOW +/-, the duration changes from "1" - "6" in sequence.*



- 11** Press A/V WINDOW +/- to select "12" (channel); then press RETURN.  
*The setting is complete.*  
*Each time you press A/V WINDOW +/-, the channel number changes from "1" - "125" in sequence.*



*At the specified time, "BLOCKED" appears in red on the screen, and the picture of the specified channel is blocked and the sound is muted.*



**To erase a CHANNEL BLOCK setting**  
Display the CHANNEL BLOCK screen and select a blank space for the day.  
The CHANNEL BLOCK setting is erased.

**To enter a new CHANNEL BLOCK setting**  
Display the CHANNEL BLOCK screen and repeat steps 4 - 10. (You can only set one CHANNEL BLOCK at a time.)

**To return to the previous menu**  
Press A/V WINDOW +/- until the cursor points to " MENU."  
Then press RETURN.

**To return to the main menu**  
Repeat the above, until you reach the main menu.

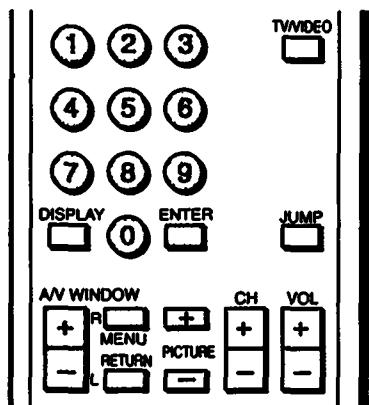
**To return to the normal screen.**  
Press MENU.

**Note**  
If the ON/OFF TIMER is set for an overlapping time (pp. 57 - 59), the later time setting takes precedence. For example, if CHANNEL BLOCK is set for 2:00 PM and ON/OFF TIMER is set for 3:00 PM, ON/OFF TIMER will take effect at 3:00 PM.

# Setting FAVORITE CHANNEL

By setting FAVORITE CHANNEL, you can select the channels you use most frequently (up to seven channels) simply by pressing RETURN.

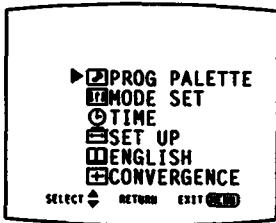
## Remote Commander



Follow these instructions to set the channels.

### 1 Press MENU.

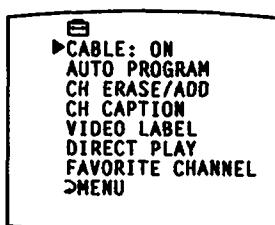
The main menu appears.



### 2 Press A/V WINDOW +/- until the cursor points to "SET UP."

### 3 Press RETURN.

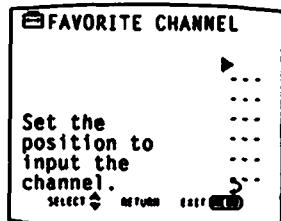
The set up menu appears.



### 4 Press A/V WINDOW +/- until the cursor points to "FAVORITE CHANNEL."

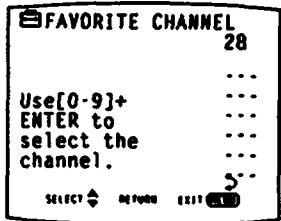
### 5 Press RETURN.

The FAVORITE CHANNEL screen appears, and the cursor points to the first channel position.



### 6 Press A/V WINDOW +/- to select the channel position; then press RETURN.

### 7 Press 0 – 9 and ENTER to set the channel number.



### 8 Press RETURN.

The setting is complete.

#### To set other channels

Repeat steps 6 – 8.

#### To erase a favorite channel setting

Press A/V WINDOW +/- until the cursor points to the channel number you want to erase; then press RETURN, press 0 and ENTER.

#### To reset a favorite channel setting

Display the FAVORITE CHANNEL screen and repeat steps 6 – 8.

#### To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "▷ MENU."

Then press RETURN.

#### To return to the main menu

Repeat the above, until you reach the main menu.

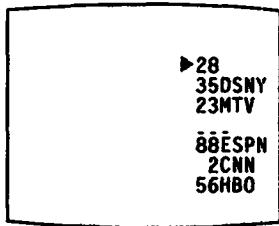
#### To return to the normal screen.

Press MENU.

## Selecting a favorite channel

After setting the channels, follow these instructions to select the channel you want to watch.

- 1** Press RETURN.  
*The FAVORITE CHANNEL display appears.*

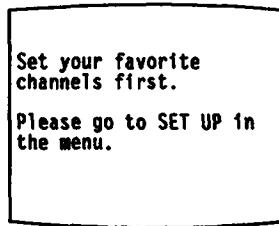


**Note**

If you have set channel captions (pp. 51 – 52), the captions appear with the channel numbers.

- 2** Press A/V WINDOW +/- to select the channel you want to watch; then press RETURN.  
*The channel is selected.*

If you press RETURN on the Remote Commander before setting FAVORITE CHANNEL, this screen appears.



Follow steps 1 – 8 to set your favorite channels, and then make the selection.

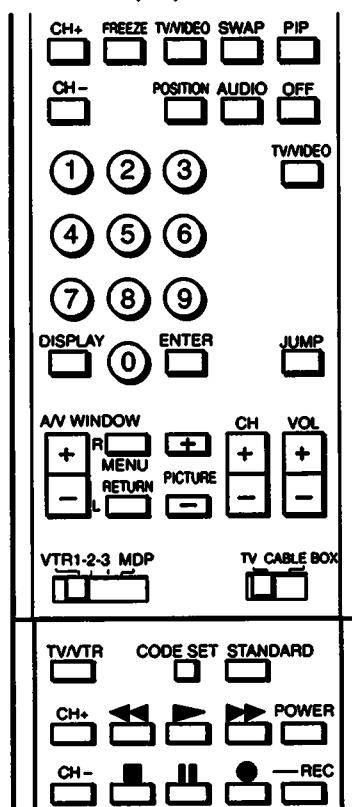
# Using the Pre-Programmed Remote Commander

You can operate other video equipment (such as VCRs, video disc players and cable boxes) that have an infrared remote detector with this supplied Remote Commander.

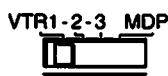
## Operating Sony video equipment

Follow these instructions to operate Sony video cassette recorders (Beta, 8 mm and VHS) and video disc players (including multi-disc players).

**Remote Commander**  
(with video control cover open)



- 1** Set the VTR1-2-3 MDP selector according to the video equipment you want to operate.



**Fig. 2: Video equipment settings**

If you want to operate a:	set to:
Beta, ED Beta VCR	VTR 1
8 mm VCR	VTR 2
VHS VCR	VTR 3
Video disc player	MDP

- 2** Use the video operating buttons to control the connected equipment.

**Fig. 3: Operating a VCR (VTR1, 2, 3)**

To turn on or off	Press POWER.
To change channels (when watching TV programs through the VCR's tuner)	Press CH +/-.
To record	Press ● and REC simultaneously.
To play	Press ▶.
To stop	Press ■.
To fast forward	Press ▶▶.
To rewind the tape	Press ◀◀.
To pause	Press III. <i>To resume normal playback, press again.</i>
To search the picture forward and backward	Keep pressing ▶▶ or ◀◀ during playback. <i>To resume normal playback, release the button.</i>
To change input mode	Press TV/VTR.

**Fig. 4: Operating a Video Disc Player (MDP)**

To turn on or off	Press POWER.
To play	Press ▶.
To stop	Press ■.
To pause	Press ▨. <i>To resume normal playback, press again.</i> <b>Note</b> This function is effective only for CAV (standard-play disc). With CLV (extended-play disc), the projection TV goes off (standby mode) if you press ▨.
To search the picture forward and backward	Keep pressing ▶▶ or ▶◀ during playback. <i>To resume normal playback, release the button.</i>

**Notes**

- If the video equipment does not have a certain function, the corresponding button on this Remote Commander will not operate.
- If you set another manufacturer's code to a VTR1-2-3 MDP selector position (pp. 66 – 67), you must also set the Sony code to operate Sony equipment.

**Caution**

When you replace the batteries, do so within approximately 30 minutes. Otherwise the settings you made under the Pre-Programmed function (pp. 66 – 68) may be erased.

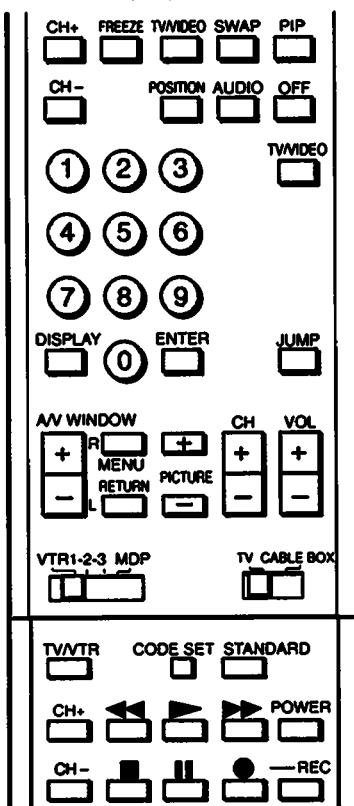
# Using the Pre-Programmed Remote Commander

## Operating non-Sony or Sony video equipment

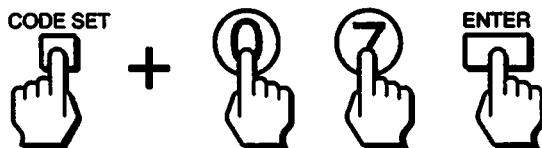
Follow these instructions to set the manufacturer's code, which will enable you to operate non-Sony and Sony video equipment with the pre-programmed Remote Commander.

**Example:** Operate an RCA video cassette recorder connected to the VIDEO 2 IN jacks.

**Remote Commander**  
(with video control cover open)



- 2** While pressing CODE SET, press 0, 7 and ENTER to set RCA's code number. (For manufacturer code numbers, see Figs. 5, 6 and 7 on p. 67.)



- 3** Use the video operating buttons to operate the connected equipment. (see Fig. 3 on p. 64 and Fig. 4 on p. 65.)

- 1** Set the VTR1-2-3 MDP selector to VTR2.



### Note

To use another manufacturer's equipment besides a Sony VCR, set the selector to a position not being used for your Sony video equipment.

**Fig. 5: VCR manufacturer code numbers**

MANUFACTURER	CODE
SONY	01, 02, 03
CANON	05
EMERSON	22, 30, 33
FISHER	10, 11, 12, 15
FUNAI	29
GENERAL ELECTRIC	05, 08
GOLDSTAR	25
HITACHI	07, 08, 36
JVC	16, 35
MAGNAVOX	05, 06, 09
MITSUBISHI	18, 19, 26, 27
MULTITECH	29
NEC	16, 23, 31
PANASONIC	05, 06
PHILCO	05, 06
PHILIPS	05, 06, 09
QUASAR	05, 06
RCA	07, 08
SAMSUNG	24, 32
SANYO	11, 15
SCOTT	21
SHARP	13, 14
SHINTOM	34
SYLVANIA	05, 06, 09
SYMPHONIC	29
TEKNIKA	28, 29
TOSHIBA	20, 21
TOTE VISION	25
ZENITH	17

**Fig. 6: MDP manufacturer code numbers**

MANUFACTURER	CODE
SONY	04
KENWOOD	58
MAGNAVOX	52
MARANZ	54
MITSUBISHI	51
PANASONIC	55
PHILIPS	52
PIONEER	51
RCA	51
SANYO	57
SHARP	56
YAMAHA	53

**Fig. 7: Sony Equipment and Code Numbers**

SONY EQUIPMENT	CODE
Beta, ED Beta VCR	01
8 mm VCR	02
VHS VCR	03
Video disc player	04

**Note**

In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied Remote Commander. This is because your equipment may use a code that is not provided with this Remote Commander. In this case, please use the equipment's own remote control unit.

**For your convenience**

Write the manufacturer name and code number for your equipment onto one of the supplied self-adhesive labels and affix the label to the Remote Commander for easy reference.

BRAND	CODE
1	
2	
3	

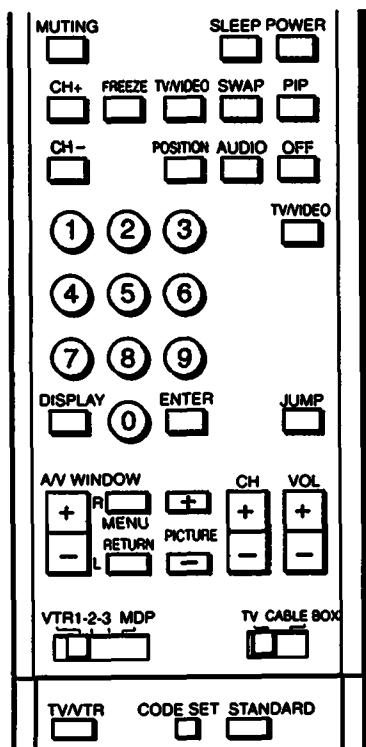
# Using the Pre-Programmed Remote Commander

## Operating a cable converter box

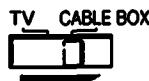
Follow these instructions to set the manufacturer's code, which will enable you to operate a connected cable converter box with the pre-programmed Remote Commander.

**Example:** Operate a connected Zenith cable converter box.

**Remote Commander**  
(with video control cover open)



- 1** Set the TV/CABLE BOX selector to CABLE BOX.



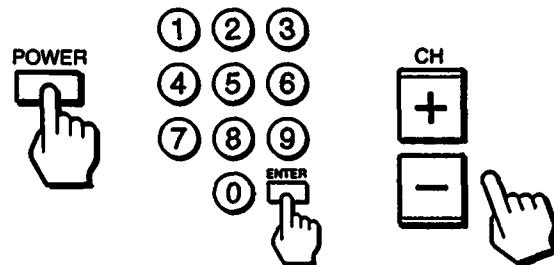
### Notes

- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- If you enter a new code number, the code number you previously entered at that setting is erased.
- In some rare cases, your equipment may use a code that is not provided with this Remote Commander and you may not be able to operate your cable converter box with the supplied Remote Commander. In this case, use the equipment's own remote control unit.

- 2** While pressing CODE SET, press 6 and 8 (Zenith's code number — see Fig. 5) and ENTER.



- 3** Use the projection TV control buttons (POWER, 0 – 9, ENTER and CH +/-) to operate the cable converter box.



### To return to the normal screen

Set the TV/CABLE BOX selector to TV; then use the projection TV control buttons to control the projection TV.

**For more details on operating the cable box**  
Refer to the operating instructions that come with the cable box.

**Fig. 8: Cable box manufacturer code numbers**

MANUFACTURER	CODE
JERRROLD	60, 61, 62, 63, 64, 65
PIONEER	69, 70
SCIENTIFIC ATLANTA	66, 67
TOCOM	71, 72
ZENITH	68

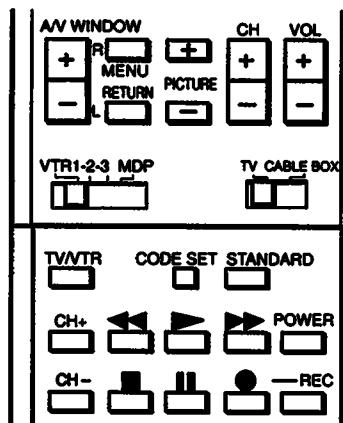
## Selecting a VCR mode directly — DIRECT PLAY

Follow these instructions to switch from TV to VCR mode by simply pressing the ▶ (playback) button on the supplied Remote Commander.

**Example:** Connect your VCR to the VIDEO 2 IN jacks, and set the VTR1-2-3 MDP selector to VTR2. When you press ▶, the input mode changes to the VCR connected to the VIDEO 2 IN jacks.

After completing the steps below, the VTR selector position is retained in the projection TV's memory.

**Remote Commander (with video control cover open)**



**1** Press MENU.  
The main menu appears.

▶ PROG PALETTE  
 MODE SET  
 TIME  
 SET UP  
 ENGLISH  
 CONVERGENCE  
 SELECT RETURN EXIT

**2** Press A/V WINDOW +/- until the cursor points to "SET UP."

**3** Press RETURN.  
The set up menu appears.

▶ CABLE: ON  
 AUTO PROGRAM  
 CH ERASE/ADD  
 CH CAPTION  
 VIDEO LABEL  
 DIRECT PLAY  
 FAVORITE CHANNEL  
 DMENU

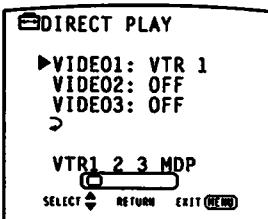
**4** Press A/V WINDOW +/- until the cursor points to "DIRECT PLAY."

**5** Press RETURN.  
A message screen appears.



**Note**  
This screen reminds you to set the manufacturer's code, if you have not already done so (pp. 66 - 67).

**6** Press RETURN again.  
The DIRECT PLAY screen appears.



**7** Press A/V WINDOW +/- until the cursor points to the video input mode. (When the video equipment is connected to VIDEO 1 IN, select "VIDEO1.")

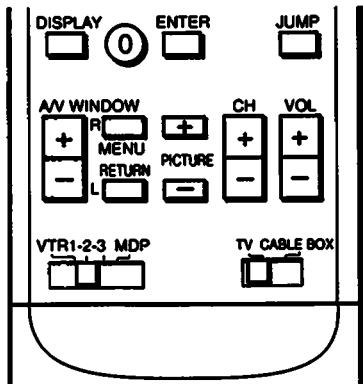
**8** Press RETURN.  
The mode display turns red.

(Continued)

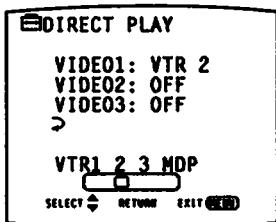
# Using the Pre-Programmed Remote Commander

Selecting a VCR mode directly – DIRECT PLAY  
*(Cont'd. from prev. page)*

## Remote Commander



- 9** Press A/V WINDOW +/- to select the VTR selector mode you have set on the Remote Commander.  
(When the VTR1-2-3 MDP selector is set to VTR2, select "VTR 2.")  
Each time you press A/V WINDOW +/-, "VTR 1," "VTR 2," "VTR 3," "MDP" and "OFF" appear in sequence.



- 10** Press RETURN.  
*The direct play setting is complete.*

To set direct play for other connected video equipment  
Repeat steps 7 – 10.

To return to the previous menu  
Press A/V WINDOW +/- until the cursor points to  
" ➤ MENU."  
Then press RETURN.

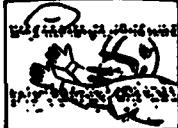
To return to the main menu  
Repeat the above, until you reach the main menu.

To return to the normal screen.  
Press MENU.

## Appendix

# Troubleshooting

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed here. If the problem still cannot be solved, contact your nearest service facility.

Symptom	Possible causes and remedies
No picture (screen not lit), no sound	<ul style="list-style-type: none"> <li>• Make sure POWER is switched on.</li> <li>• Check the power cord connection.</li> <li>• Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly.</li> <li>• Make sure that the TV/CABLE BOX selector is set to TV.</li> </ul>
Poor or no picture (screen not lit), good sound	<ul style="list-style-type: none"> <li>• Adjust the picture using the VIDEO screen (pp. 42 – 45).</li> <li>• Check the antenna/cable connections.</li> <li>• Adjust the color registration (pp. 24 – 25).</li> </ul>
Good picture, no sound	<ul style="list-style-type: none"> <li>• Press VOLUME + on the projection TV or VOL + on the Remote Commander.</li> <li>• Press MUTING on the Remote Commander.</li> <li>• Check the MTS setting (p. 49).</li> <li>• Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly.</li> <li>• Make sure SPEAKER is set correctly (p. 50).</li> </ul>
No color for color programs	<ul style="list-style-type: none"> <li>• Check the HUE and COLOR settings (pp. 42 – 43).</li> </ul>
Snow and noise only	<ul style="list-style-type: none"> <li>• Check that it is an active or correct channel.</li> <li>• Check the cable setting.</li> <li>• Check antenna/cable connections.</li> </ul>
 Dotted lines or stripes	This is often caused by local interference (for example, cars, neon signs and hairdryers). Adjust the telescopic aerial for minimum interference.
 Double images or ghosts	Reflections from nearby mountains or buildings often cause this problem. Connecting a highly directional outdoor antenna or a CATV cable may improve the picture.
Remote control does not operate	<ul style="list-style-type: none"> <li>• Check the battery in the Remote Commander.</li> </ul>
No picture and/or sound for the connected equipment	<ul style="list-style-type: none"> <li>• Check that the TV/VIDEO button is set correctly.</li> <li>• Check that the connections are properly made.</li> <li>• Check that the power of the connected equipment is turned on.</li> <li>• Check that the connected equipment is set correctly.</li> </ul>
Try another channel. It could be station trouble.	

# Specifications

Structure	Screen and projector, rear projection type	AUDIO (VAR) OUT (phono jacks) More than 900 mVrms (100% modulation) at the maximum volume setting (variable)
Projection system	3 picture tubes, 3 lenses, horizontal in-line system	Impedance: 5 kilohms
Picture tube	7 inch high-brightness monochrome tubes (5.5 raster size), with optical coupling and liquid cooling system	AUDIO OUT (phono jacks) 900 mVrms (100% modulation)
Projection lenses	High performance, large-diameter hybrid lens F 1.0	Impedance: 5 kilohms
Screen material	Plastic lenticular, Plastic Fresnel	
Resolution	KPR-41EXR95 KPR-46EXR15 KPR-53EXR15	760 lines 850 lines 900 lines
Projected picture size (in inches, measured diagonally)	KPR-41EXR95 KPR-46EXR15 KPR-53EXR15	41 46 53
Screen brightness (cd/m <sup>2</sup> )	KPR-41EXR95 KPR-46EXR15 KPR-53EXR15	2,000 1,600 1,250
Television system	American TV standards	
Channel coverage	VHF: 2 – 13 UHF: 14 – 69 Cable TV: 1 – 125	
Antenna	75 ohm external antenna terminal for VHF/UHF	
Input jacks	VIDEO IN 1 S VIDEO IN (4-pin mini DIN) Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal) 75-ohms Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative Audio (phono jacks): 500 mVrms (100% modulation) Impedance: 47 kilohms  VIDEO IN 2 and 3 Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative Audio (phono jacks): 500 mVrms (100% modulation) Impedance: 47 kilohms	Supplied accessories Remote Commander RM-Y112 (1) with 2 size AA (R6) EVEREADY batteries
Output jacks	MONITOR OUT S VIDEO MONITOR OUT (4-pin mini DIN) Y: 1 Vp-p, 75-ohms unbalanced, sync negative Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative Audio (phono jacks): 500 mVrms (100% modulation) Impedance: 10 kilohms	Optional accessories U/V mixer EAC-66 Connecting cable RK-74A VMC-810S/820S YC-15V/30V VCR Tray SU-PJT1
		Design and specifications are subject to change without notice.
		<b>(●) SOUND RETRIEVAL SYSTEM</b>
		The (●) Sound Retrieval System is manufactured by Sony Corporation under license from the Hughes Aircraft Company, a subsidiary of GM Hughes Electronics. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.
		<b>(●)</b> , SOUND RETRIEVAL SYSTEM and SRS® are trademarks of the Hughes Aircraft Company, a subsidiary of GM Hughes Electronics.

**Design and specifications are subject to change without notice.**

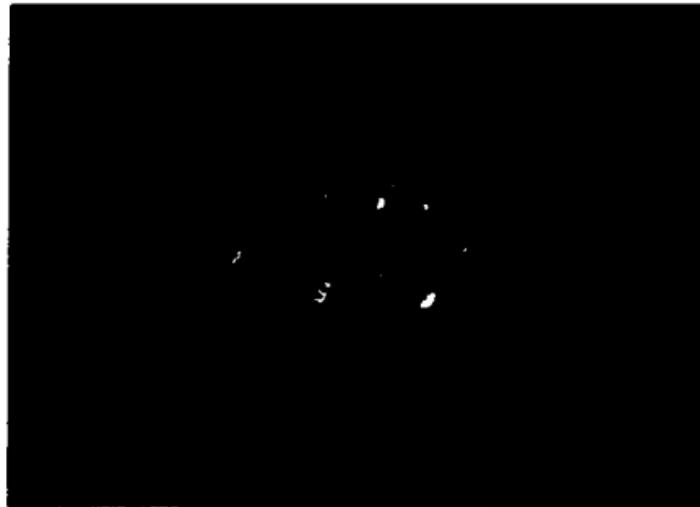
#### SOUND RETRIEVAL SYSTEM

The (C) Sound Retrieval System is manufactured by Sony Corporation under license from the Hughes Aircraft Company, a subsidiary of GM Hughes Electronics. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

(C) , SOUND RETRIEVAL SYSTEM and SRS® are trademarks of the Hughes Aircraft Company, a subsidiary of GM Hughes Electronics.

# Index

<b>A</b>	Adjustment	45
	audio (balance, bass, treble) .....	47
	picture (bright, color, hue, sharp) .....	42
	AUDIO OUT jacks .....	19
	AUDIO (VAR) OUT jacks .....	19
	AUTO PROGRAM .....	28 - 29
	A/V WINDOW buttons .....	21 - 33, 36 - 37, 42 - 63, 69 - 70
<b>C</b>	Cable TV channel chart .....	27
	Cable converter box .....	10, 39, 68
	CABLE ON/OFF .....	26 - 27
	CENTER SPEAKER IN terminals .....	19
	CH CAPTION .....	51 - 52
	CH +/- buttons .....	28 - 31, 34, 51
	Channel	
	adding .....	32 - 33
	erasing .....	30 - 31
	presetting .....	28 - 29
	Connecting	
	antenna cable .....	13 - 14
	audio system .....	19
	other equipment .....	15 - 19
	CONVERGENCE .....	24 - 25
<b>D</b>	DEMO button .....	35
	DIRECT PLAY .....	69 - 70
	DISPLAY button .....	35
<b>E</b>	ENTER button .....	29, 51, 62, 66, 68
<b>F</b>	FAVORITE CHANNEL .....	62 - 63
	Front .....	7
<b>J</b>	JUMP button .....	35
<b>M</b>	MONITOR OUT jacks .....	17 - 18
	MTS mode .....	49
	MUTING button .....	35
<b>N</b>	NR ON/OFF .....	45
<b>O</b>	On-screen menus .....	20 - 21
<b>P</b>	PICTURE +/- buttons .....	43
	Picture and sound mode .....	36 - 37
	Picture-in-Picture (PIP) .....	38 - 41
	POWER button .....	22
	Pre-programmed Remote Commander .....	64 - 70
<b>R</b>	Rear .....	9
<b>S</b>	S-VIDEO ON/OFF .....	15, 46
	SLEEP button .....	35
	SRS mode .....	48
	STEREO lamp .....	48 - 49
	SPEAKER .....	50
	STANDARD button .....	37, 43, 47
<b>T</b>	Timer activated functions	
	channel block .....	60 - 61
	current time set .....	55 - 56
	daylight saving .....	54 - 55
	on/off timer .....	57 - 58
	TIMER lamp .....	58
	TV/CABLE BOX selector .....	68
	TV/VIDEO button .....	15 - 18, 26, 28, 64, 66
	Trinitone .....	44
<b>V</b>	VCR .....	15 - 18, 38 - 39, 64 - 67, 69 - 70
	VHF/UHF antenna terminal .....	13 - 16, 39
	VIDEO 1, 2, 3 IN jacks .....	15 - 18, 39
	VIDEO LABEL .....	53
	Video operating buttons .....	64 - 66
	VOL +/- button .....	19, 34, 35
	VTR1-2-3 MDP selector .....	64 - 67
	VIDEO 3 OUT jacks .....	17 - 18



# *Color Rear Video Projector*

**KPR-41EXR95**

**KPR-46EXR15**

**KPR-53EXR15**